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ABC Cable Accessories

1.1 ABC aluminum plate anchoring clamp

ABC aluminum plate anchoring clamp are used for the anchoring of a 2 or 4 core overhead cable to poles or walls by means of standard hooks.

HE Code	Conductor Range(mm2)
HECC-156	4x(16-25) mm2
HECC-157	2x(16-25)mm2
HECC-158	4x(16-25) mm2
HECC-160	2x(16-25)mm2
HECC-161	4x(16-25) mm2

1.2 Aluminum Alloy Bracket

Tension bracket are designed to be used on pole or wall, connect tension clamp to be fixed onto poles, cross arms or wall. The brackets are mounted with stainless steel strap or lag screws.

HE Code	Description	Tensile Load
HECA1500	AL Tension Bracket	8KN
HECA2000	AL Tension Bracket	20KN

Material: High tensile aluminum alloy
Finish: Plain

1.3 Aluminum Alloy house tension clamp


AHTC06


AHTC07


AHTC08


AHTC1400


AHTC1500


AHTC1600


AHTC-JB

Material: High strength aluminum alloy, nylon plus fiber glass, stainless steel
Product property: They are characterized by high mechanical stability, reduced dimensions for easier handling, high mechanical and climatic resistance.
Cable gripping device in insulating material ensures the double insulation of the neutral core and avoids damage to sheath, secured parts, no tools required. Stainless steel bail with two marbles compressed on the end, the is conception allows an easier locking on the body of the clamp. They are in accordance with NFC 33-041.

HE Code	Conductor Range(mm2)
AHTC06	16-20
AHTC07	16-25
AHTC08	16-25
AHTC1400	50-70
AHTC1500	50-70
AHTC1600	50-70
AHTC-JBG	50-70

1.4 Aluminum Alloy Suspension bracket

The SPD suspension clamp is designed for the installation and suspension of LV-ABC cables to poles or walls. For straight lines and angles up to 90°. No tools are needed for installation, equipped with a wing nut.

HE Code	Conductor Range (mm2)	Messenger Dia(mm)	Tensile Load (KN)
HESC-1	25-95	7.5-15.5	10
HESC-2	16-95	5-13	10
HESC-3	25-95	7.5-16.5	10
HESC-4	4 x (16-35)	/	12
HESC-5	4x (35-95)	/	12
HESC-6	2-4x（25-120）≤30°	/	12
HESC-7	16-95	5-13	12
HESC-8	16-95	5-13	12

The clamp is made of corrosion resistant aluminum alloy and weather resistant material.

1.5 Cable Drop Clamp

Tension clamp is designed for FTTH drop cable.

HE Code	Description	Tensile Load
HETC0750	Tension Clamp	750N

Type of thermoplastic material: Nylon PA66
UV protection: (ASTM G154-16 Cycle 1)
Hardware material: galvanized steel
High resistance to corrosion
Tensile strength: 0.7KN (min.)
Cable diameter and type of drop: Flat or round 2 X 4mm (Max.)
Storage and operating temperature range: -10°C to +60°C

1.6 FTTH Stainless steel Tension clamp

FTTH fiber optic cable clamp, designed for hanging, flat fiber optic cable.

HE Code	Cable range
HEFH-1	Flat 3x5mm
HEFH-2	Flat 3x8mm

Raw material: Stainless steel 201 or 304
Finish: Plain

1.7 Nail Fixing

HEFN-1

HEFN-2

HEFN-3

HEFN-4

Nail fixing provides supports for connections with nails (self-retaining).
They are made up of a synthetic support highly resistant to weathering with a device for the installation of a second beam. A zip tie to hold the conductors and one steel nail to fix the device into the pole or wall.

HE Code	Conductor Range(mm)
HEFN-1	15-54
HEFN-2	12-45
HEFN-3	15-30
HEFN-4	15-30

Type of thermoplastic material: Nylon PA66
UV protection: (ASTM G154-16 Cycle 1)
Hardware material: steel zinc plated
High resistance to corrosion
Tensile strength: 0.7KN (min.)
Nail diameter x length: 6 X 80mm
Storage and operating temperature range: -10°C to +60°C

1.8 Nylon Zip Tie

Zip tie provides bundling for various kinds of cables.
They allow the bundle of conductors to be gathered together.

HE Code	Length		Width	Range Diameter	Tensile Strength	
	Inch	MM	MM	MM	LBs	KGs
HEZT2506	2.4	60	2.5	2-11	18	8
HEZT2508	3.2	80		2-16		
HEZT2510	4	100		2-22		
HEZT2512	4.7	120		2-30		
HEZT2515	6	150		2-35		
HEZT2520	8	200		3-50		
HEZT3615	6	150	3.6	3-35	40	18
HEZT3620	8	200		3-50		
HEZT3625	10	250		3-65		
HEZT3630	12	300		3-80		
HEZT3637	14.6	370		3-105		
HEZT4815	6.3	150	4.8	3-40	50	22
HEZT4820	8	200		3-50		
HEZT4825	10	250		3-65		
HEZT4830	12	300		3-80		
HEZT4835	14	350		3-90		
HEZT4837	14.6	370		3-100		
HEZT4840	16	400		3-105		
HEZT4845	16.9	430		3-120		
HEZT4850	17.7	450		3-130		
HEZT7220	19.7	500		3-150		
HEZT7225	8	200	7.2	3-50	120	55
HEZT7230	10	250		4-65		
HEZT7235	12	300		4-80		
HEZT7240	14	350		4-90		
HEZT7245	16	400		4-105		
HEZT7250	18	450		4-110		
HEZT7255	20	500		4-150		
HEZT9040	21.6	550		4-165		
HEZT9045	16	400	9	8-105	175	79.4
HEZT9050	18	450		8-118		
HEZT9055	20	500		8-150		
HEZT9060	21.6	550		8-160		
HEZT9065	23.6	600		8-170		
HEZT9072	25.6	650		8-185		
HEZT9080	28.3	720		10-195		
HEZT9090	31.5	800		10-230		

Plastic material: Nylon PA6
UV protection: (ASTM G154-16 Cycle 1)
Colors: Black, white, red, green, yellow, blue.
Tensile strength: as indicated in the table
Storage and operating temperature range: -20°C to +60°C

1.9 Plastic Wedge Tension Clamps

The plastic anchoring clamp is suitable for insulated low-voltage ABC cable. It is also suitable for multiple conductors.
Easy installation and perfect insulated function. It is in accordance with the NFC 33-042.

HE Code	Cable Range
HESTA-1	1X10 / 1X16
HESTA-2	2X16 / 2X25
HESTA-3	4X16 / 4X25
HESTA-4	1X16 / 1X70
HESTA-5	4X16 / 4X25
HESTA-6	2X6 / 2X16
HESTA-7	1X4 / 1X25
HESTA-8	1X4 / 1X25
HESTA-9	16-25
HESTA-10	25-50
HESTA-11	50-70

Raw material: Galvanized steel rope; plastic clamp body

1.10 Stainless Steel Straps and Buckles

Stainless steel straps are usually used with tooth form stainless steel buckles.
Straps are rolled and available in various widths.

HE Code	Dimensions(mm)			Max Tensile Strength	Stainless steel buckles
	Width	Length	Thickness	kg	Size
HESS1230	13	30.5	0.7	700	13
HESS5830	16	30.5	0.7	850	16
HESS3430	19.5	30.5	0.7	1000	19.5

Raw material: stainless steel

1.11 Steel Tension Bracket

Suitable for laying fiber optic cables, normally assembled with stainless steel strap on the pole.
Hot dip galvanized steel with corrosion resistant.
Great mechanical resistance ideal for spans up to 200 meters
Tensile stregth up to 20 kN
Security element (Split cotter)

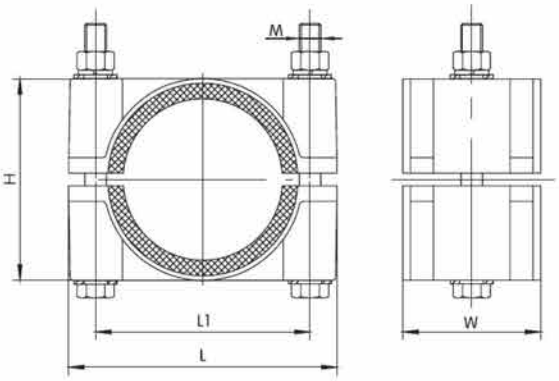
HE Code	Description	Tensile Strength(daN)
HETB2010	Curve type	200
HETB2020	Angle type	200
HETB2030	Flat type	200

Raw material: galvanized steel
Finish: hot dip galvanized

1.12 High voltage cable cleat

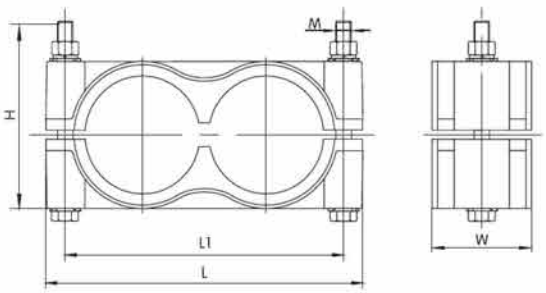
1.12.1 High voltage cable clamp (for single line)

HE Code	Applicable outside diameter of cable	Main dimensions(mm)				
		I	B	H	R	M
HEHVWS1	75-84	150	90	114	120	12
HEHVWS2	85-94	160	80	124	130	14
HEHVWS3	95-104	175	80	138	140	14
HEHVWS4	105-114	185	80	150	150	14
HEHVWS5	115-124	195	90	160	160	16
HEHVWS6	125-134	215	90	175	175	16
HEHVWS7	135-146	230	100	195	190	16
HEHVWS8	140-165	265	100	205	210	16



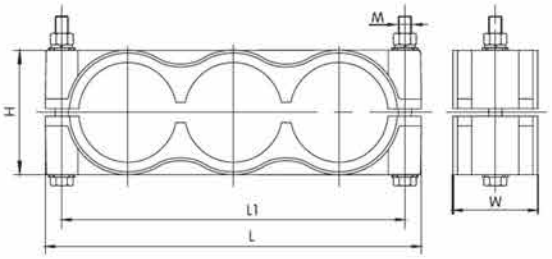
1.12.2 High voltage cable clamp (for double wire)

HE Code	Applicable outside diameter of cable	Main dimensions(mm)				
		L	B	H	R	M
HVW(2)1	40~50	174	60	78	140	12
HVW(2)2	50~60	194	60	92	160	12
HVW(2)3	60~70	219	70	100	185	12
HVW(2)4	70~80	239	70	110	205	12
HVW(2)5	80~90	259	80	126	225	12
HVW(2)6	90~100	279	80	136	245	12
HVW(2)7	100~110	304	90	150	270	16
HVW(2)8	110~120	324	90	160	290	16
HVW(2)9	120~130	344	90	120	310	16
HVW(2)10	130~140	364	100	190	330	16
HVW(2)11	140~150	384	100	200	350	16



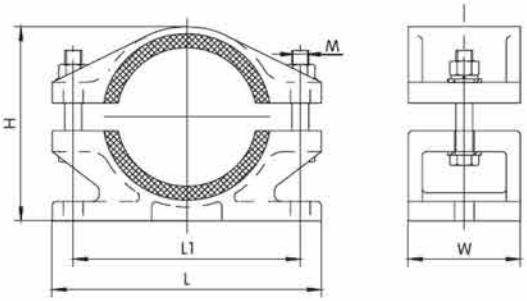
1.12.3 High voltage cable clamp (for three wires)

HE Code	Applicable outside diameter of cable	Main dimensions(mm)				
		L	B	H	R	M
HVW(3)1	40~50	239	60	86	205	12
HVW(3)2	50~60	269	60	96	245	12
HVW(3)3	60~70	304	70	106	270	12
HVW(3)4	70~80	334	70	116	300	12



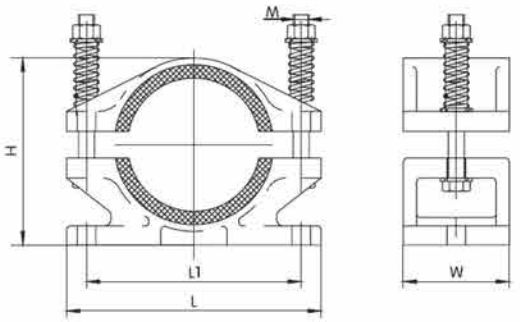
1.12.4 High voltage cable clamp

HE Code	Applicable outside diameter of cable	Main dimensions(mm)				
		L	B	H	R	M
HVW1	55~65	155	75	100	125	10
HVW2	65~80	170	75	120	140	10
HVW3	80~100	192	80	140	162	12
HVW4	100~125	215	80	165	185	12
HVW5	126~136	244	100	180	210	12
HVW6	136~150	250	100	200	215	12
HVW7	140~166	280	100	215	230	12



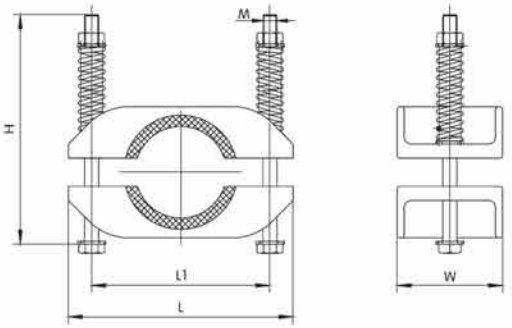
1.12.5 High voltage cable clamp

HE Code	Applicable outside diameter of cable	Main dimensions(mm)				
		L	B	H	R	M
HVD1	55-65	155	75	100	125	10
HVD2	65-80	170	75	120	140	10
HVD3	80-100	192	80	140	162	12
HVD4	100-125	215	80	165	185	12
HVD5	126-136	244	100	180	210	12
HVD6	136-150	250	100	200	215	12
HVD7	140-166	280	100	215	230	12



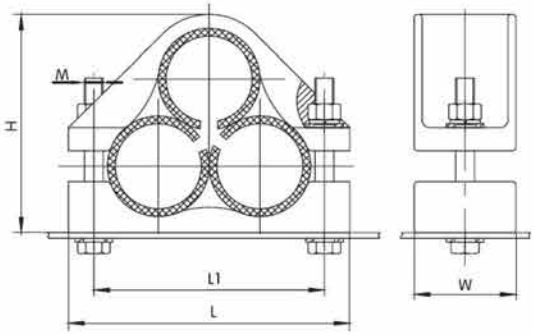
1.12.6 High voltage cable clamp

HE Code	Applicable outside diameter of cable	Main dimensions(mm)				
		L	B	H	R	M
HVG01	55-65	160	75	100	127	10
HVG0	65-80	160	75	120	127	10
HVG1	80-100	182	80	140	148	12
HVG2	100-120	230	80	165	190	12
HVG3	120-136	230	80	180	192	12
HVG4	136-150	230	85	200	190	12
HVG5	150-160	250	85	215	210	12



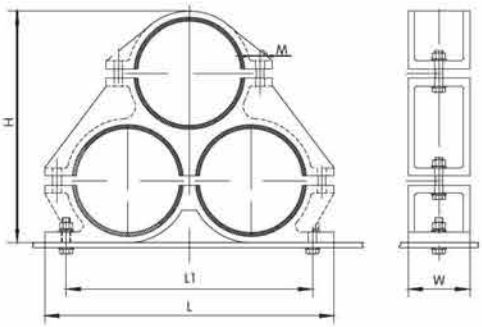
1.12.7 High voltage cable clamp

HE Code	Applicable outside diameter of cable	Main dimensions(mm)				
		L	B	H	R	M
HVP1	45-55	180	65	135	150	12
HVP2	55-68	224	70	156	186	12
HVP3	68-80	274	75	186	224	14
HVP4	80-90	288	80	205	245	14
HVP5	90-100	332	100	235	280	16
HVP6	100-114	342	100	252	290	16
HVP7	114-130	352	100	265	300	16



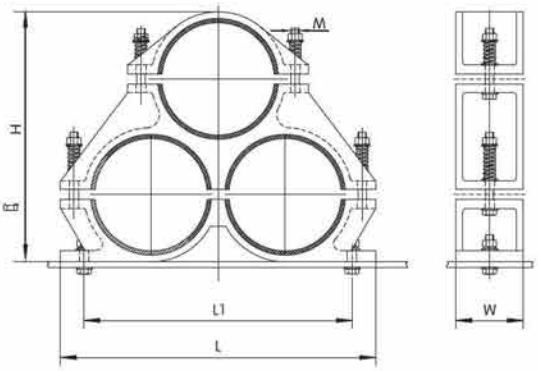
1.12.8 High voltage cable clamp

HE Code	Applicable outside diameter of cable	Main dimensions(mm)				
		L	B	H	R	M
HEVG1	45-55	260	65	173	1230	12
HEVG2	55-68	290	70	196	250	12
HEVG3	68-80	320	75	230	270	14
HEVG4	80-90	340	80	245	290	14
HEVG5	90-100	340	100	272	290	16
HEVG6	100-114	370	100	292	320	16
HEVG7	114-130	420	100	331	370	16



1.12.9 High voltage cable clamp

HE Code	Applicable outside diameter of cable	Main dimensions(mm)				
		L	B	H	R	M
HVG1H	45-55	260	65	173	230	12
HVG2H	55-68	290	70	196	250	12
HVG3H	68-80	320	75	230	270	14
HVG4H	80-90	340	80	245	290	14
HVG5H	90-100	340	100	272	290	16
HVG6H	100-114	370	100	292	320	16
HVG7H	114-130	420	100	331	370	16



1.13 HE4XN Series four-cores-centralized strain clamp

● Application

HE4XN four-core-centralized strain clamp is suitable for the end of aerial wire terminal, it's action is fixing or tightening the insulation conductor. The clamp has been designed four core parallel groove, after clamping the tour insulation conductor (not remove the insulation layer) tighten up the bolt to have large grip strength.

● Specification

HE Code	Suitable Conductor (mm2)	Explanation	Product legend
HE4XN-1A	4x16~50	Pull rod type, Aluminum alloy body	
HE4XN-2A	4x70~120		
HE4XN-1B	4x25~50	Pull plate, The body is weather resistant engineering plastics	
HE4XN-2B	4x70~120		
HE4XN-1C	4x10		
	4x16~25	Aluminum alloy body, Engineering Plastics inner wedge.	
HE4XN-2C	4x35~50		
HE4XN-3C	4x70		
HE4XN-4C	4x95		
HE4XN-5C	4x120		
HE4XN-1D	4x10	,	
HE4XN-2D	4x16	More suitable for the installation of parallel bundle conductor	
	4x25		
HE4XN-3D	4x35		
	4x50		
HE4XN-4D	4x70		
HE4XN-5D	4x95		
	4x120		

1.14 HEQNZ Series insulation strain clamp(wedge type)

● Application

HEQNZ series is suitable for strain clamp insulation string of 20kV aerial insulation aluminum core wire JKLYJ terminal or two ends fixing and fighten aerial insulation.

● Structure feature

The shell made of anti-oxidate high strength aluminum alloy, Without waste power The core of wedge made of insulating reinforce plastics, have good insulation Not remove the insulation layer, Al-core wire are current use. Wedge shape structure, easily installing.

le HEQNZ1
35~50mm2

HEQNZ3
120~150mm2

HEQNZ3
120~150mm2

● 1~10kV Specification

HE Code	Suitable Conductor (mm^2)	Aerial insulation aluminum conductor/1kV		Aerial insulation aluminum conductor/10kV		Grip strength(kN)	Specified Failure Load (kN)
		Dia(mm)	Applicable wedge core	Dia(mm)	Applicable wedge core		
HEQNZ1	35	9.8	1kV/35	15.8	10kV/35	3.4	7.5
	50	11.2	1kV/50	17.1	10kV/50	4.6	
HEQNZ2	70	12.8	1kV/70	18.8	10kV/70	6.7	14.5
	95	14.8	1kV/95	20.4	10kV/95	8.9	
HEQNZ3	120	16.2	1kV/120	21.8	10kV/120	11.3	22
	150	18.2	1kV/150	23.4	10kV/150	13.7	
HEQNZ4	185	20.2	1kV/185	25	10kV/185	17.3	36.4
	240	22.6	1kV/240	27.2	10kV/240	22.5	

● 20kV Specification

HE Code	Suitable Conductor(mm^2)	Aerial insulation aluminum conductor/10kV		Grip strength(kN)	Specified Failure Load (kN)
		Dia(mm)	Applicable wedge core		
HEQNZ3Q	35	19.2	20kV/35	3.4	10.8
	50	20.5	20kV/50	4.6	
	70	22	20kV/70	6.7	
HEQNZ4Q	95	23.7	20kV/95	8.9	22.1
	120	25.2	20kV/120	11.3	
	150	26.7	20kV/150	13.7	
HEQNZ5Q	185	28.3	20kV/185	17.3	45.5
	240	30.6	20kV/240	22.5	
	300	32.8	20kV/300	28.2	

1.15 HEQNL Series insulation strain clamp (pull rod type)

● Application

HEQNL series is suitable for strain clamp insulation string of 1-10kV aerial insulation aluminum core wire JKLYJ terminal or two ends fixing and fighten aerial insulation

● Structure feature

The shell made of anti-oxidate high strength aluminum alloy, Without waste power The core of wedge made of insulating reinforce plastics, have good insulation Not remove the insulation layer, Al-core wire are current use. Wedge shape structure, easily installing.

HEQNL1Q (35~50mm2)
stainless steel handle

HEQNL3Q(120~150mm2)
stainless steel handle

HEQNL4Q(185~240mm2)
stainless steel handle

HEQNL1Q (35~50mm2)
Iron handle

HEQNL3Q(120~150mm2)
Iron handle

HEQNL4Q(185~240mm2)
Iron handle

● 1~10kV Specification

HE Code	Suitable Conductor (mm^2)	Aerial insulation aluminum conductor/1kV		Aerial insulation aluminum conductor/10kV		Grip strength (kN)	Specified Failure Load (kN)
		Dia(mm)	Applicable wedge core	Dia(mm)	Applicable wedge core		
HEQNL1Q	35	9.8	1kV/35	15.8	10kV/35	3.4	7.5
	50	11.2	1kV/50	17.1	10kV/50	4.6	
HEQNL2Q	70	12.8	1kV/70	18.8	10kV/70	6.7	14.5
	95	14.8	1kV/95	20.4	10kV/95	8.9	
HEQNL3Q	120	16.2	1kV/120	21.8	10kV/120	11.3	22
	150	18.2	1kV/150	23.4	10kV/150	13.7	
HEQNL4Q	185	20.2	1kV/185	25	10kV/185	17.3	36.4
	240	22.6	1kV/240	27.2	10kV/240	22.5	

1.16 HEQNJ Series insulation strain clamp(wedge type)

● Application

HEQNJ series of wedge type insulating clamp for 1kV and below Aluminum twisted overhead insulated cables (JKLYJ) terminal or the tensional both ends, the overhead insulated wire fixing and tensioning.

● Structure feature

The shell and the wedge core are made of high strength engineering plastic.
cable without stripping the insulation, can be directly installed.
Wedge structure, easy installing and reliable.

● Specification

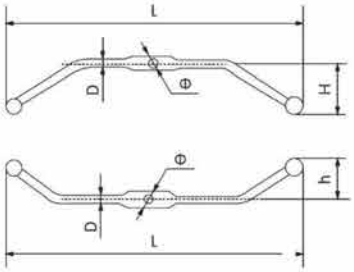
HE Code	Suitable Conductor (mm^2)	Aerial insulation aluminum conductor/1kV		Specified Failure Load (kN)
		Dia(mm)	Applicable wedge core	
HEQNJ1635	16~35	6~11	1kV/16-35	10
HEQNJ5070	50~70	12~14	1kV/50~70	15
HEQNJ95120	95~120	15~17.5	1kV/95~120	20

Arcing Horn

2.1 Arcing Horn

Arcing horn, also known as the angle gap, is the insulator protection hardware on the overhead transmission line.

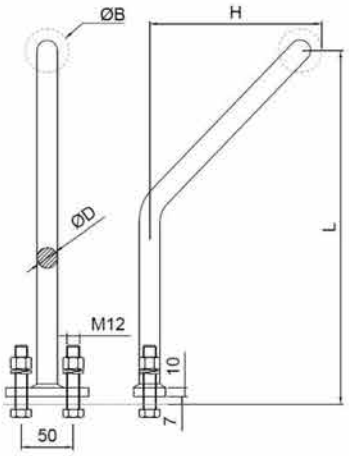
2.1.1 Arcing Horn



HE Code	Dimensions					Wt.	Voltage
	L	H	h	D	Φ	kg	KV
AH-1	712	197	114	16	14.5	1.2	138
AH-2	762	197	114	16	14.5	1.26	161-230

Material: hot dip galvanized steel; aluminum alloy

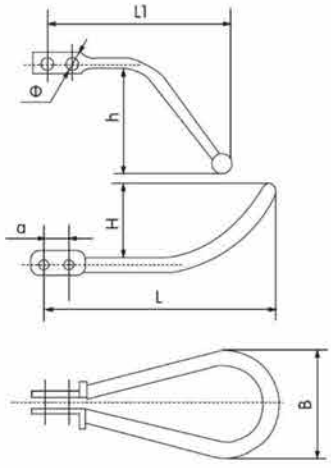
2.1.2 Arcing Horn



HE Code	L	H	D	B	Ball	Voltage(KV)	Weight(KGs)
HEDI-3010	300	100	16		No	≤66	85
HEDI-3013	300	130	16		No	≤66	89
HEDI-3018	300	180	16		No	≤66	95
HEDI-3022	300	220	16		No	≤66	101
HEDI-3511	350	110	16		No	66-170	93
HEDI-3513	350	130	16		No	66-170	94
HEDI-3519	350	195	16		No	66-170	102
HEDI-3524	350	240	16		No	66-170	107
HEDI-3533	350	335	16		No	66-170	120
HEDI-3711	375	110	16	30	Yes	≥170	105
HEDI-3713	375	130	16	30	Yes	≥170	107
HEDI-3719	375	195	16	30	Yes	≥170	113
HEDI-3724	375	240	16	30	Yes	≥170	119

Material: hot dip galvanized steel; Standard: ISO1461
Material: hot dip galvanized steel; aluminum alloy

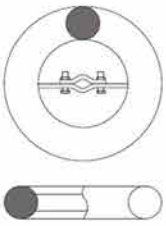
2.1.3 Arcing Horn



HE Code	Dimensions							Wt.	Voltage
	L	L1	H	h	a	B	Φ	kg	KV
ZH-31	434	372	203	270	45	203	14.5	2	203
ZH-32	445	381	114	197	45	203	14.5	2.1	203

Material: hot dip galvanized steel; aluminum alloy

2.2 Weight equalizing ring



HE Code	Weight (kg)
HEZC1	40
HEZC2	60

2.3 Shielding ring

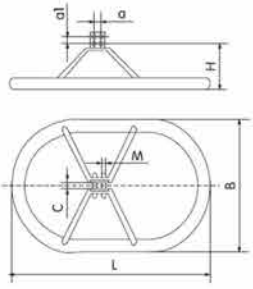


Fig.1

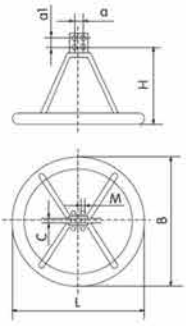


Fig.2

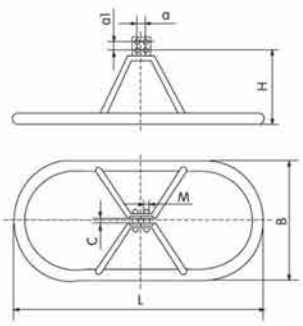


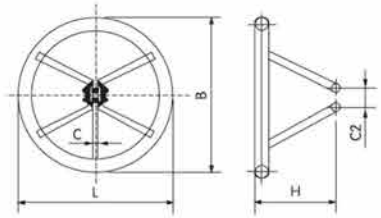
Fig.3

HE Code	Fig No.	Main dimensions(mm)							Weight (kg)
		L	B	H	a	a1	C	M	
HESR-1060660SP	1	1060	660	310	40	50	18	12	6.7
HESR-820660S	1	820	660	150	40	50	23	12	5.3
HESR-660	2	660	660	290	40	50	18	12	4.8
HESR-1060660D	3	1060	660	200	40	50	24	12	6.1
HESR-1060660S	3	1060	660	410	40	50	24	12	6.5

The bodies are aluminum alloy, the other parts are hot-dip galvanized steel.

2.4 Grading ring

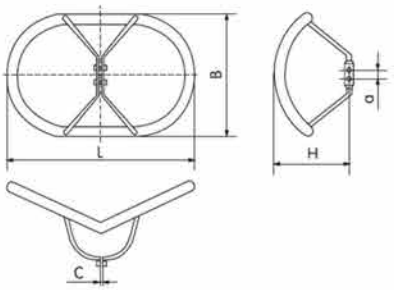
2.4.1 Grading ring



HE Code	Main dimensions(mm)					Weight (kg)
	L	B	H	a	C	
HEGR-660C38	660	660	220	80	38	5

The bodies are aluminum alloy, the other parts are hot-dip galvanized steel.

2.4.2 Grading ring



HE Code	Main dimensions(mm)					Weight (kg)
	L	B	H	a	C	
HEGR-1060x660	1060	660	500	80	20	6.7

The bodies are aluminum alloy, the other parts are hot-dip galvanized steel.

2.4.3 Grading ring

HE Code	Fig No.	Main dimensions(mm)					Weight (kg)
		L	B	H	a	C	
HEGR-760x600D	1	760	660	500	80	20	7.6
HEGR-1026x676S	2	1026	676	290	80	20	8.5
HEGR-660C36	3	660	660	220	80	36	5

The bodies are aluminum alloy, the other parts are hot-dip galvanized steel.

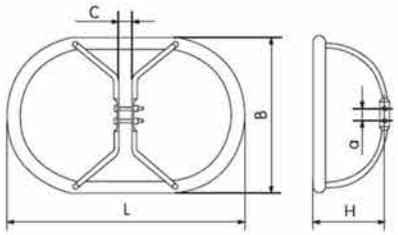


Fig.1

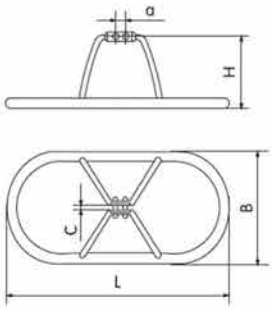


Fig.2

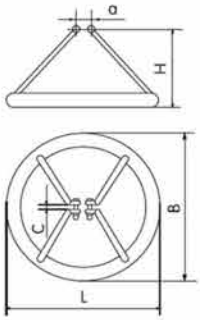


Fig.3

Arrester

Zinc oxide arrester. It is the most advanced overvoltage protector in the world.

Because its core element resistor unit is made of zinc oxide and various metal oxides, compared with traditional silicon sulfide arrester, the volt-ampere characteristics of the resistor unit are greatly improved, and the current passing capacity of the resistor sheet is improved. Thereby bringing about a fundamental change in the characteristics of the arrester.

Under the normal working voltage of the arrester, the current flowing through the arrester is only microampere, which is equivalent to an insulator. When overvoltage occurs, the resistance value of the arrester drops sharply, causing the current flowing through the arrester to instantly increase to thousands of amperes. The arrester is in a conducting state to release overvoltage energy, thereby effectively limiting the damage of overvoltage to power transmission and distribution equipment.

HE Code	Rated Voltage KV(rms)	MCOV KV(rms)	DC 1mA Reference voltage (kV) ⩾	Current impulse Residual Voltage			Long impulse current 2000 μ S	High current impulse withstand (kA)	0.75 DC Senate Reference voltage Maximum Leakage Stream (μ S)	Creepage distance (mm)
				1/4 μ s Steep current impulse KV(crest)	8/20 μ s Lightning current impulse KV(crest)	30/60 μ s Switching current impulse KV(crest)				
HE5W-3	3	2.55	4.5	11.3	9	8.9	150	65	<50	280
HE5W-9	9	7.65	13.5	33.7	27	23.8	150	65	<50	300
HE5W-11	11	10.2	16.5	42.2	36	27	150	65	<50	350
HE5W-21	21	17	31.5	71.8	63	54.2	150	65	<50	650
HE5W-24	24	19.5	36	82	72	62	150	65	<50	650
HE5W-33	33	27.5	49.5	112	99	86.7	150	65	<50	780
HE5W-36	36	29	54	117	103	92.4	150	65	<50	910
HE10W-3	3	2.55	4.5	11.3	9	8.9	250	100	<50	280
HE10W-9	9	7.65	13.5	33.7	27	23.8	250	100	<50	300
HE10W- 11	11	10.2	16.5	42.2	36	27	250	100	<50	350
HE10W- 21	21	17	31.5	71.8	63	54.2	250	100	<50	650
HE10W- 24	24	19.5	36	82	72	62	250	100	<50	650
HE10W- 33	33	27.5	49.5	112	99	86.7	250	100	<50	780
HE10W- 36	36	29	54	117	103	92.4	250	100	<50	910

Clamps

4.1 Hotline Clamps

HESY hot line clamps are designed according to ASTM B686 standard and capable of connect conductors without cutting off the electricity.

3.1.The eye screw threads is attached in a threaded chamber and protected by a corrosion-inhibiting compound effective over a wide temperature range.

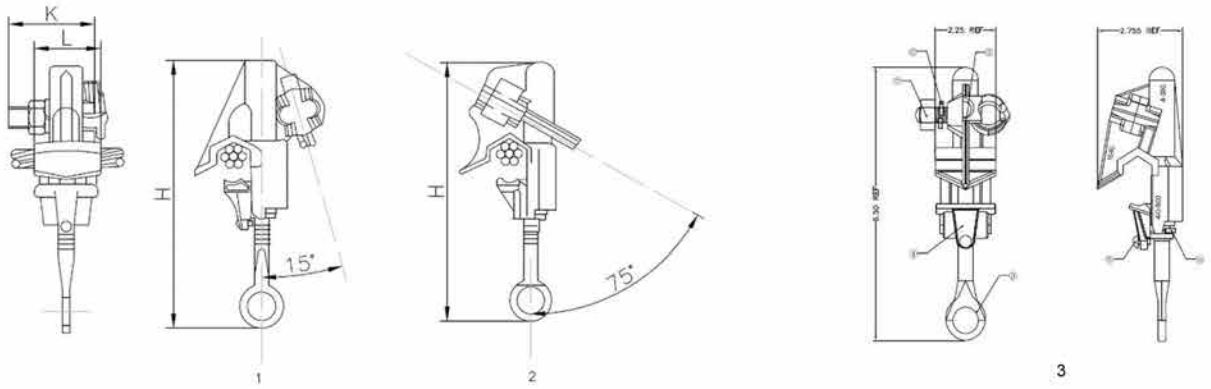
3.2.Eye screw threads are isolated from the zone of the arc caused by charging currents.

3.3.The clamp jaws are designed to provide maximum contact with the conductor having current rating of 600 amperes at 75℃.

3.4.The clamp is designed to minimize conductor damage resulting from vibration, and to avoid working of the conductor during tightening.

3.5.Terminal torque and eye screw torque is 300 inch-pounds.

3.6.Both tap connectors and eye screw shall have lock washers fabricated from the materials complying the requirements of ANSIB18.21.1.



HE Code	Fig No.	L(mm)	H(mm)	K(mm)	EYE BOLT	EYE TAP	MAIN LINE	TAP LINE	MAIN MARK	TAP MARK
HESY1520	1	32	130	47	M10X49	M10X45	AL 25-70MM2 (3.5-11.35MM)	AL 25-70MM2 (3.5-11.35MM)	8-2/0	8-2/0
HESY1530	2	47	165	56	M12X68	M10X52	AL 50-280MM2 (4.11-18.9MM)	AL 50-150MM2 (4.11-13.9MM)	50-280MM2	35-150MM2
HESY1540	3						CU/AL 800MCM-4/0 (1.301-0.502)	CU #4 STR- 350 SOL (0.703-0.198)		

Raw material: Aluminum alloy, steel, brass and stainless steel
Finish: Plain

4.2 Parallel Clamps

4.2.1 Aluminium Parallel Groove Clamps

HE Code	Specification	Bolts
HEAPG-A1	AL 16-70 mm²	Single bolt
HEAPG-A2	AL 16-150 mm²	Single bolt
HEAPG-B2	AL 16-70 mm²	Double bolts
HEAPG-B3	AL 16-150 mm²	Double bolts
HEAPG-B4	AL 25-240 mm²	Double bolts
HEAPG-C1	AL 16-70 mm²	Three bolts
HEAPG-C2	AL 16-150 mm²	Three bolts
HEAPG-C3	AL 25-240 mm²	Three bolts
HEAPG-C4	AL 35-300 mm²	Three bolts

Aluminum for clamp body.
Galvanized steel for bolts, nuts.

4.2.2 Bimetallic parallel groove Clamps

HE Code	Specification	Bolts
HECAPG-A1	Cu 6-50 mm² Al 16-70 mm²	Single bolt
HECAPG-A2	Cu 10-95 mm² Al 25-150 mm²	Single bolt
HECAPG-B1	Cu 6-50 mm² Al 16-70 mm²	Double bolts
HECAPG-B2	Cu 10-95 mm² Al 25-150 mm²	Double bolts
HECAPG-B3	Cu 25-185 mm² Al35-200 mm²	Double bolts
HECAPG-C1	Cu 6-50 mm² Al 16-70 mm²	Three bolts
HECAPG-C2	Cu 10-95 mm² Al 25-150 mm²	Three bolts
HECAPG-C3	Cu 25-185 mm² Al 35-240 mm²	Three bolts
HECAPG-C4	Cu 35-240 mm² Al 35-300 mm²	Three bolts

Aluminum alloy clamp body.
Galvanized steel bolts, nuts.

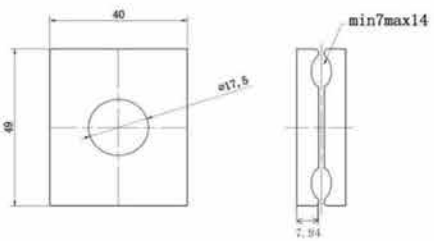
4.2.3 Brass parallel Groove Clamps

Brass parallel groove clamps are produced for earthing conductors.

HE Code	Bolt Qty.	Bolt size	Cross section	Dimensions		
			mm²	A	B	L
PGCAC-1	2	M8	10-50	29	30	28
PGCAC-2	2	M8	16-95	38	45	37
PGCAC-3	2	M8	95-140	44	45	43

Brass for clamp body.
Galvanized steel for bolts, nuts.

4.2.4 Grounding Clamps



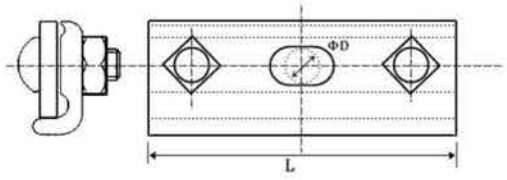
Grounding clamps are produced to attach ground wires to shield wire supports or bolts on transmission lines.

HE Code	Description	Ground wire range	Mounting bolt
GDC-1	Grounding clamp	3/16″ -7/16″	5/8″

Material is steel hot dip galvanized to ASTM A153.

4.2.5 Messenger Wire clamp

Straight cable suspension clamps are produced to secure messenger cables to poles.

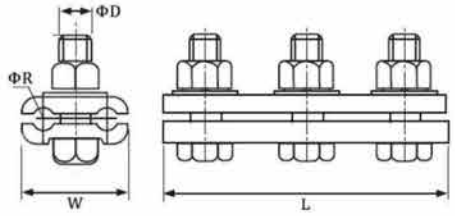


HE Code	Bolt Qty.	Bolt size	Dimensions			Wt.
			L	ΦD	Strand size	kg
CSCS-1	1	5/8″	2 1/2″	11/16″	1/4″ -7/16″	0.304
CSCS-2	3	5/8″	5 5/8″	11/16″	1/4″ -7/16″	0.807
CSCS-3	3	5/8″	5 3/4″	11/16″	1/4″ -7/16″	0.889
CSCS-4	3	3/4″	5 5/8″	13/16″	5/16″ -3/8″	0.962

Material: malleable iron
Finish: hot dip galvanized

4.2.6 Steel Parallel Groove Clamp

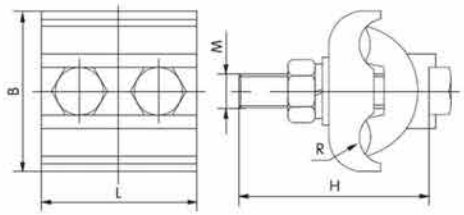
Guy clamps are produced to anchor AAC, AAAC, ACSR and AACSR with equal diameters at tension towers.



HE Code	Cross section	Bolt Qty.	Dimensions(mm)			
	(mm^2)		ΦD	L	W	ΦR
PG-1	16-25	2	10	70	38.5	3.5
PG-2	35-50	2	12	80	42	5
PG-3	70-95	3	12	111	52	7
PG-4	120-150	3	16	140	61.5	9
PG-5	185-240	3	16	145	68.5	11
PG-6	300-400	4	16	200	90	14
PG-7	500	4	20	215	100	15.5

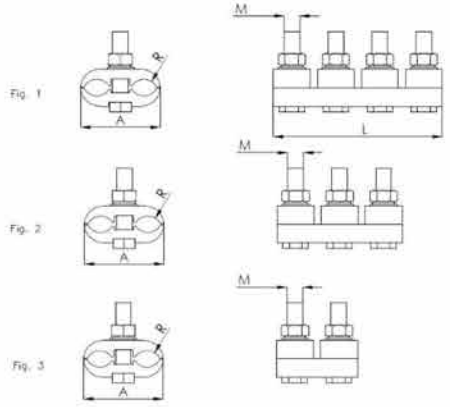
Material aluminum alloy for clamp body;
galvanized steel for carriage bolts or machine bolts.

4.2.7 HELBG Aluminum special-shaped Parallel clamps (Beijing type)



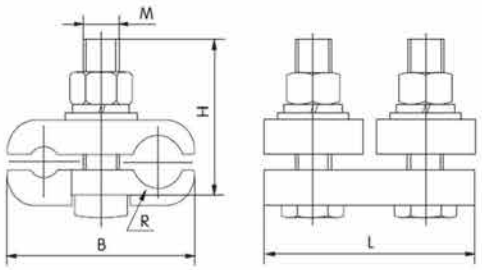
HE Code	Suitable Conductor	Main dimensions(mm)					Bolt No.
		L	A	H	R	M	
HELBG-16-70-2P	10~70	42	36	45	5	8	2
HELBG-35-120-2P	35~120	45	47	55	7	10	2
HELBG-35-120-2PL		67	47	55	7	10	2
HELBG-35-120-3P		67	47	55	7	10	2
HELBG-50.-240-2P	50~240	45	63	70	10	10	2
HELBG-50-240-2PL		67	63	70	10	10	2
HELBG-50-240-3P		67	63	70	10	10	3

4.2.8 HEJB Aluminum Parallel clamps (for aluminum stranded wire and steel core aluminum stranded wire)



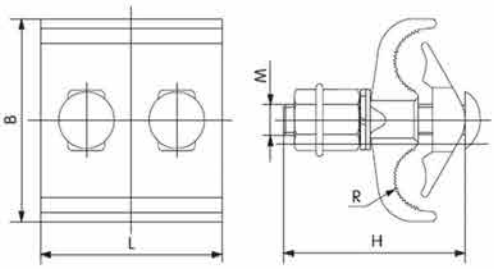
HE Code	Design No.	Cable Range (mm)	L	A	R	M
HEJB-1	3	10-70	72	38	3.5	10
HEJB-2	3	35-50	80	45	5	12
HEJB-3	2	70-95	112	52	7	12
HEJB-4	2	120-150	140	62	9	16
HEJB-5	2	185-240	142	71	11	16
HEJB-6	1	300-400	215	100	15.5	20
HEJB-7	1	500-630	230	110	18.5	20

4.2.9 HETBG Copper special-shaped Parallel clamps



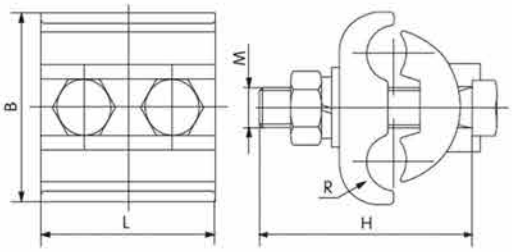
HE Code	Suitable Conductor	Main dimensions(mm)					Bolt No.
		L	B	H	R	M	
HETBG-00	16~25/16~25	50	35	35	3.5	10	2
HETBG-10	35~50/16~25	60	40	35	5/3.5	10	2
HETBG-11	35~50/35~50	60	40	35	5	10	2
HETBG-21	70~95/35~50	98	50	50	5/7	12	2
HETBG-22	70~95/70~95	98	50	50	7	12	2
HETBG-31	120~150/35~50	10.8	62	50	8.5/5	12	3
HETBG-32	120~150/70~95	10.8	62	50	8.5/7	12	3
HETBG-33	120~150/120~150	108	62	50	8.5	12	3
HETBG-41	185~240/35~50	10.8	65	50	11/5	12	3
HETBG-42	185~240/70~95	108	65	50	11/7	12	3
HETBG-43	185~240/120~150	10.8	65	50	11/8.5	12	3
HETBG-44	185~240/185~240	10.8	65	50	11	12	3

4.2.10 HELBP Aluminum Parallel clamps



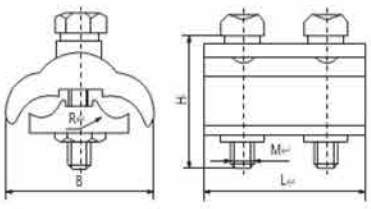
HE Code	Suitable Conductor	Main dimensions(mm)					Bolt No.
		L	B	H	R	M	
HELBP-301	10~95	34	54	50	8	8	1
HELBP-302		46	54	50	8	8	2
HELBP-502	25~150	50	54	50	8	8	2
HELBP-602	50~240	84	66	70	10	12	2
HELBP-603		122	66	70	10	12	3
HELBP-803	95~300	133	68	70	11.5	12	3

4.2.11 HTBG Copper Parallel clamps



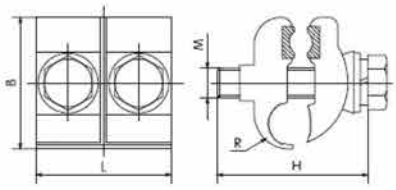
HE Code	Suitable Conductor	Main dimensions(mm)					Bolt No.
		L	B	H	R	M	
HTBG-10~70-2P	10~70	40	34	45	5	8	2
HTBG-10~70-3P		60	34	45	5	8	3
HTBG-35~120-2P	35~120	45	45	55	7	10	2
HTBG-35~120-3P		70	45	55	7	10	3
HTBG-50~240-2P	50~240	45	57	65	10	10	2
HTBG-50~240-3P		70	57	65	10	10	3

4.2.12 Aluminum special-shaped Parallel-groove clamp (Export type)



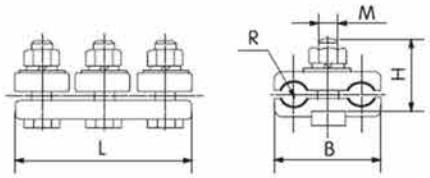
HE Code	Suitable Conductor	Main dimensions(mm)					Bolt No.
		L	B	H	R	M	
HELBC-6-20	6~120	50	45	45	5	8	2
HELBC-10-150	10~150	50	50			8	2
HELBC-35-185	35~185	64	62			10	2

4.2.13 Copper-aluminum special-shaped Parallel-groove clamp (Embedded copper type)



HE Code	Suitable Conductor	Main dimensions(mm)					Bolt No.
		L	B	H	R	M	
HETLQ-35-120-2P	35-120	45	44	55	7	10	2
HETLQ-35-120-3P		70	44	55	7	10	3
HETLQ-50-240-2P	50-240	45	56	65	10	10	2
HETLQ-50-240-3P		70	56	65	10	10	3

4.2.14 Parallel groove clamps for steel wire



HE Code	Suitable Conductor	Dimensions(mm)				Weight (kg)
		L	B	R	M	
HEPCS-1	25~35	90	44	4.5	12	2
HEPCS-2	50~70	90	50	6	16	2
HEPCS-3	100~120	124	56	7	16	2
HEPCS-4	150~185	138	70	10	16	3

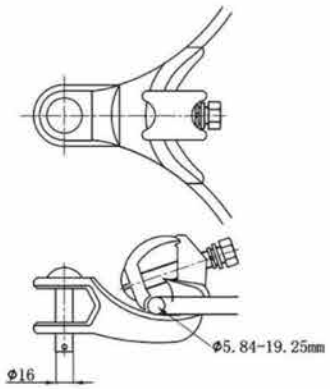
The clamp body is changed into a malleable cast iron, the other parts are hot-dip galvanized steel.

4.3 Suspension Clamps

Table of percentages between the gripping force of the suspension clamp and the rated tensile force of the conductor:

Conductor	Construction(Al/St)	Percentage %
	1.7	14
	4.04.5	18
	5.06.5	20
ACSR	7.08.0	22
	11.020.2	24
Stee wire	Ultimate strength: (1176-1274/mm2)	14
Al-conductor		24

4.3.1 Angle Suspension Clamps

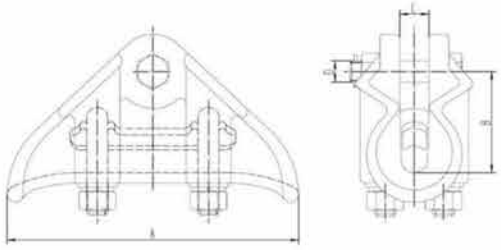


Angle suspension clamps are produced to support conductors.

HE Code	Description	Ground wire range	Mounting bolt
ASC-1	Angle suspension clamp	5.84-19.25	16

Clamp body is made of steel, hot dip galvanized.

4.3.2 HEXGH Aluminum Suspension Clamps

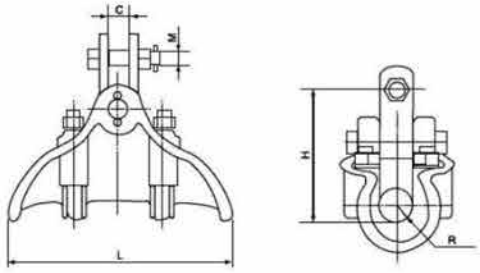


HEXGH clevis suspension clamps are produced to connect AAC, AAAC, ACSR and AACSR with connecting bolts on flying angle towers.

HE Code	Conductor(mm)	UTS(KN)	Dimensions(mm)			
			A	B	C	D
HEXGH-2	6-13	40	178	60	24	16
HEXGH-3	10-20	60	180	60	22	16
HEXGH-4	12.7-26	60	225	75	30	16
HEXGH-5	23-34	60	262	87	35	16
HEXGH-6	34-44	100	300	92	48	18

Clamps are assembled with two clamping bolts.
Aluminum for clamp body; galvanized steel for hardware.

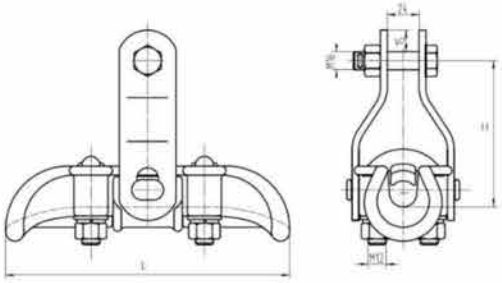
4.3.3 HEXGB Suspension Clamps with clevis Type



HE Code	Conductor range (mm)	Dimension(mm)					Strength load
		L	H	C	M	R	Kn
HEXGB-60	19-28	250	144	20	16	14	60
HEXGB-80	23-33	300	152	20	18	17	90
HEXGB-120	34-45	360	160	20	18	24	120
HEXGB-160	37-46	360	160	24	24	24	160

Body are made of aluminum alloy.
Hardware are made of steel, hot dip galvanized.

4.3.4 HEXGZ Suspension Clamps

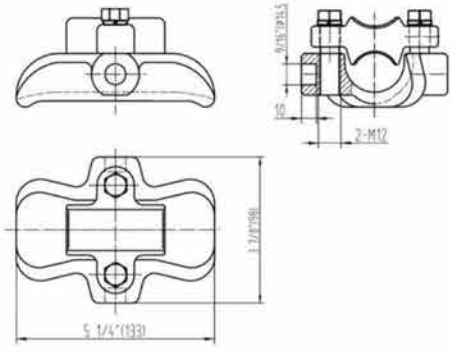


HEXGZ suspension clamps are made of aluminum alloy, with steel clamp at the bottom, the tensile strength is strengthened, giving high performing feature.

HE Code	Conductor range (mm)	Dimension(mm)					Strength load	Wt.
		L	H	C	M	R	kN	kg
HEXGZ-3	12-27	300	160	28	18	14	70	3.8
HEXGZ-6	27-44	300	182	34	18	22	120	5.8

Raw material: aluminum
Finish: Hot dip galvanized.

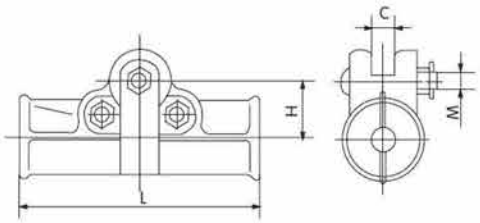
4.3.5 HEXZL Trunnion Suspension Clamps



HEXZL trunnion suspension clamps are produced to attach main conductors to tap conductors, AAC and ACSR earth wires at suspension strings.
Clamps can be attached with preformed armor rods.

HE Code	Conductor range (mm)	Dimension(mm)			Strength load	Wt.
		W	L	H	Kn	kg
HEXZL-3	6.35-32.0	98	130	82	40	0.5
HEXZL-4	25.4-38.1	98	130	82	40	0.6
HEXZL-5	38-51	98	130	102	40	1

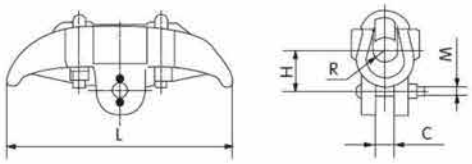
4.3.6 Suspension clamp (Carried-up & Hang-down Optionally)



HE Code	Suitable Conductor Dia.(mm)	Main dimensions (mm)				Specified failure load (kN)	Weight (kg)
		C	M	H	L		
HEXCF-300	23.7	24	16	60	250	40	3
HEXCF-400	26.8	24	16	60	250	40	3.5
HEXCF-1400	51	24	16	63	260	60	4.8
HEXCF-1440	51.36	24	16	63	300	60	5.5

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

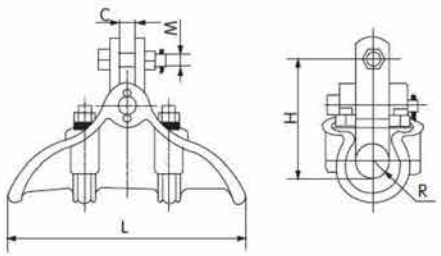
4.3.7 Suspension clamp (Under arle type)



HE Code	Applicable Conductor (mm)	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		H	C	M	R	L		
HEXCSK	23.7~27.6	55	24	16	16	300	60	3

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

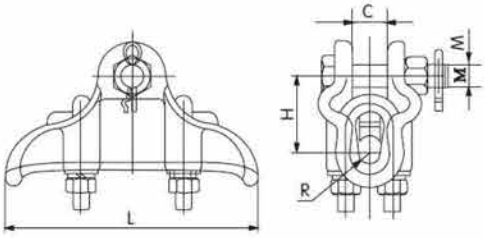
4.3.8 Suspension clamp (Hang-down type)



HE Code	Applicable Conductor (mm)	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		H	C	M	R	L		
HEXC5X	23.7~27.6	150	20	16	17	300	70	4.8
HEXC6X	36~43	180	20	18	22	300	90	4.8

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

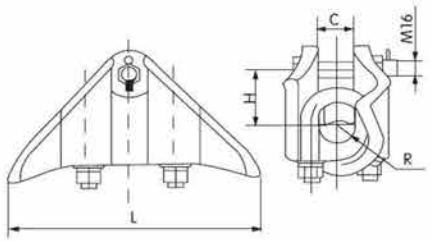
4.3.9 Suspension Clamps (Envolope type)



HE Code	Applicable Conductor (mm)	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		H	C	M	R	L		
HEXCTB-2	5.1~12.5	52.5	25	16	18	166	40	1
HEXCTB-3	12.4~17	50.5	23	16	11.5	200	40	1.5
HEXCTB-4	19~23.5	59.5	27	16	13.5	225	40	2.3
HEXCTB-5	24.2~28	70	32	16	16	260	60	4.4
HEXCTB-6	25-35	68	35	16	17.5	216	60	3.6
HEXCTB-8	48-53	97	56	20	27	300	60	5.5

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

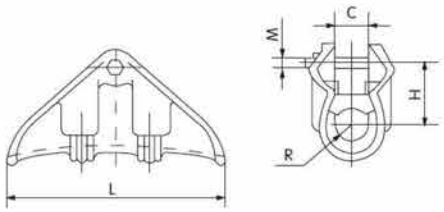
4.3.10 Suspension Clamps (Envolope and corona-proof type)



HE Code	Applicable Conductor (mm)	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		H	C	M	R	L		
HEXCTF-1	36~43	92	44	18	22	300	80	3.8
HEXCTF-2	43~51	100	56	16	26.5	350	70	5.6

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

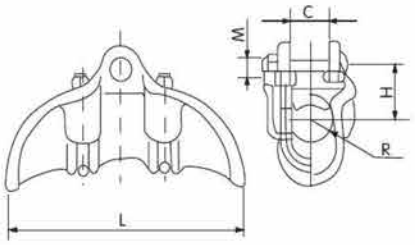
4.3.11 Aliumimium Alloy suspension clamps



HE Code	Applicable Conductor (mm)	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		H	C	M	R	L		
HELXC-3	14~17.5	50	22	16	10	200	40	1.5
HELXC-4	17~22.4	62	28	16	12.5	240	40	2.2
HELXC-5	21~28	72	35	16	15	260	60	2.8
HELXC-6	27~34	80	42	16	19	300	70	3.7
HELXC-7	33~40	85	44	16	22	300	70	4.2

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

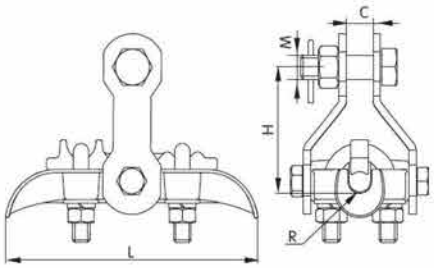
4.3.12 Aliumimium Alloy suspension clamps



HE Code	Applicable Conductor (mm)	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		H	C	M	R	L		
HELXC-51	40~52	73	56	16	27	350	40	5.6
HELXC-57	53~57	70	60	20	30	350	70	6.2

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

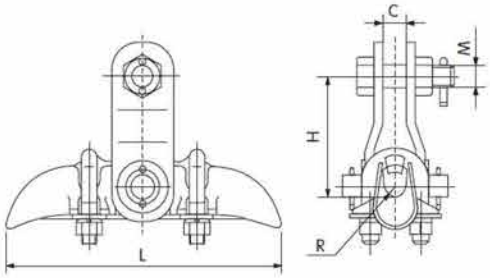
4.3.13 Suspension clamps (Energy saving type rotary)



HE Code	Applicable of wire diameter	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		L	C	R	H	M		
HEXCJ-1	5.0~7.0	175	18	4	82	16	40	1.07
HEXCJ-2	7.1~13.0	175	18	7	82	16	40	1.09
HEXCJ-3	13.1~21.0	198	18	11	102	16	40	1.25
HEXCJ-4	21.1~26.0	215	18	13.5	110	16	40	1.62

The clamp body and keepers are malleable iron. cotter-pins are stainless steel. the other parts are steel. All ferrous parts are hot-dip galvanized.

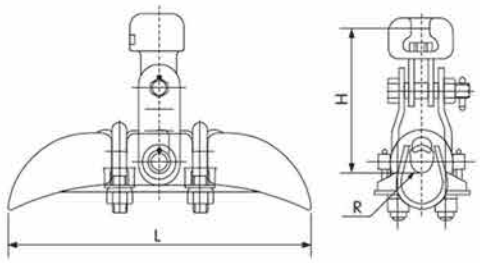
4.3.14 Suspension clamps (trunnion type)



HE Code	Applicable of wire diameter	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		L	C	R	H	M		
HEXCH-1	5.0~7.0	180	18	4	82	16	40	1.4
HEXCH-2	7.1~13.0	200	18	7	82	16	40	1.8
HEXCH-3	13.1~21.0	220	18	11	102	16	40	2
HEXCH-4	21.1~26.0	251	18	13.5	110	16	40	3
HEXCH-5	23-33	300	18	17	87	16	70	4.4
HEXCH-6	24-44	300	18	23	93	16	70	4.7
HEXCH-7	45-52	300	25	27	100	16	70	5

The body and keeper are made of malleable iron.
Cotter-pins are made of stainless steel, other parts are made of steel.
All ferrous parts are hot-dip galvanized.

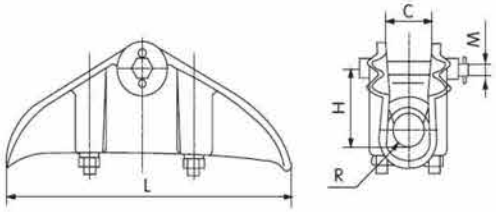
4.3.15 Suspension clamps (with socket-clevis)



HE Code	Applicable of wire diameter	Main dimensions(mm)			Specified Failure load (kN)	Weight (kg)
		L	R	H		
HEXCW-5	23~33	300	17	157	70	5.1
HEXCW-6	24~44	300	23	163	70	5.4
HEXCW-7	45-52	300	27	170	70	5.7

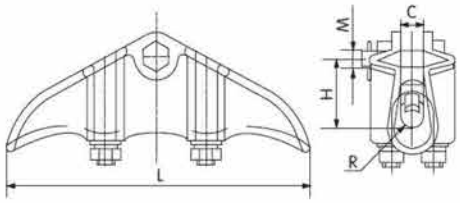
The clamp body, keepers and socket-clevis are malleable iron, the closed-pine is stainless steel work. The other parts are steel.
All ferrous parts are hot-dip galvanized.

4.3.16 Suspension clamps



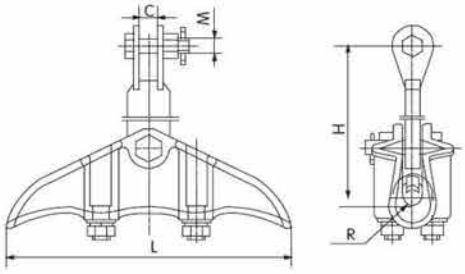
HE Code	Applicable of wire diameter	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		L	C	R	H	M		
HEXCT-1	5.0~7.0	180	18	40	60	18	40	3.3
HEXCT-2	7.1~13.0	200	18	7	75	18	40	4.9
HEXCT-3	13.1~21.0	220	27	11	75	16	40	5.6
HEXCT-4	21.1~26.0	250	27	13.5	75	16	40	6.5
HEXCT-5	23.0~33.0	300	38	17	81	16	60	8.7
HEXCT-6	34.0~45.0	300	46	23	89	16	60	9.8
HEXCT-2.1	7.0~13.0	200	20	7	135	16	40	4.3
HEXCT-4A	21.1~26.0	250	20	13.5	133	16	60	6.9

The clamp body and keepers are malleable iron. cotter-pins are stainless steel. the other parts are steel. All ferrous parts are hot-dip galvanized.



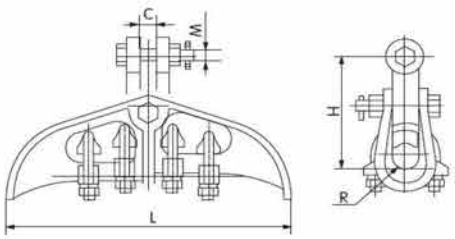
HE Code	Applicable of wire diameter	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		L	C	R	H	M		
HEXTJ-2	11~13	300	19	8	52	18	100	4.4

The clamp body and keepers are malleable iron. cotter-pins are stainless steel. the other parts are steel. All ferrous parts are hot-dip galvanized.



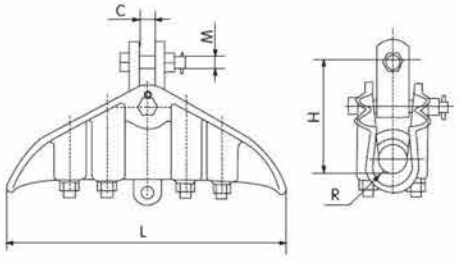
HE Code	Applicable of wire diameter	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		L	C	R	H	M		
HEXTJ-3	13.1~18.0	300	18	9	190	16	70	4.8
HEXTJ-4	21.1~23.0	300	18	11	190	16	70	4.9

The clamp body and keepers are malleable iron. cotter-pins are stainless steel. the other parts are steel. All ferrous parts are hot-dip galvanized.



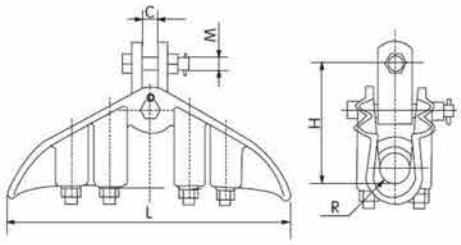
HE Code	Applicable of wire diameter	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		L	C	R	H	M		
HEXTJ-5	23~43	390	24	22	121	22	120	8.8
HEXTJ-5A	23~43	476	24	22	180	22	120	9.1
HEXTJ-5B	23~43	476	24	22	180	24	160	13.4

The clamp body and keepers are malleable iron. cotter-pins are stainless steel. the other parts are steel. All ferrous parts are hot-dip galvanized.



HE Code	Applicable of wire diameter	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		L	C	R	H	M		
HEXTJ-5Z	36.0~43.0	400	26	22	202	24	120	16
HEXTJ-6Z	36.0~47.0	500	26	24	212	24	150	20

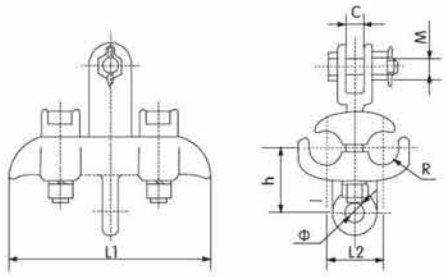
The clamp body and keepers are malleable iron. cotter-pins are stainless steel. the other parts are steel. All ferrous parts are hot-dip galvanized.



HE Code	Applicable of wire diameter	Main dimensions(mm)					Specified Failure load (kN)	Weight (kg)
		L	C	R	H	M		
HEXTJ-6.1	36~43	900	38	22	410	36	120	70
HEXTJ-7.1	43~50	1100	38	25	410	36	300	82

The clamp body and keepers are malleable iron. cotter-pins are stainless steel. the other parts are steel. All ferrous parts are hot-dip galvanized.

4.3.17 Suspension clamps for twin jumper conductors



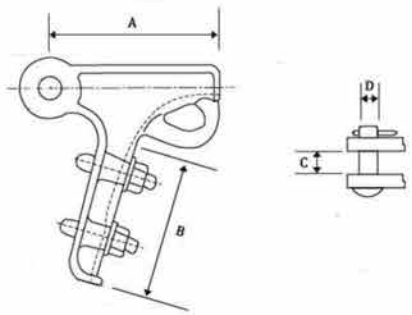
HE Code	Applicable of wire diameter	Main dimensions(mm)							Specified failure load(kN)	Weight (kg)
		L1	L2	C	R	h	Φ	M		
HEXTS-1	18~24	200	50	19	13	57	18	16	70	4.5
HEXTS-2	25~31	200	56	19	16	62	18	16	70	5
HEXTS-2A	17~21	200	50	19	11	57	18	16	70	4.5
HEXTS-2B	21~27	200	52	19	14	59	18	16	70	5
HEXTS-5	23~33	200	60	20	17	55	18	18	100	4.2
HEXTS-6	34~45	250	77	20	23	70	18	16	70	7.5

The clamp body and the press plate are malleable iron. cotter-pins are stainless steel. The other parts are steel. All ferrous parts are hot-dip galvanized.

4.4 Tension Clamps

4.4.1 Aluminum Alloy Strain Clamps

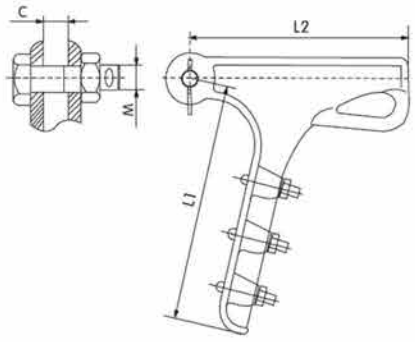
HLLG serial strain clamps are made of high-strength aluminum alloy.
They are produced to attach Al and ACSR conductors at overhead lines towers.



HE Code	Bolt Qty.	Conductor range (mm)	Dimension(mm)				Tensile (KN)
			A	B	C	D	
HLLG-1	2	6-12	80	80	20	16	40
HLLG-2	2	9-14	100	130	20	16	40
HLLG-3	3	8-18	140	170	20	16	70
HLLG-3L	3	12.5-21.8	155	245	28	16	70
HLLG-4	4	12-22.5	292	320	28	16	100
HLLG-5	5	16-32	280	380	36	22	120
HLLG-6	6	28.5-46.5	330	450	50	22	130

Aluminum alloy for clamp body; galvanized steel for hardware.

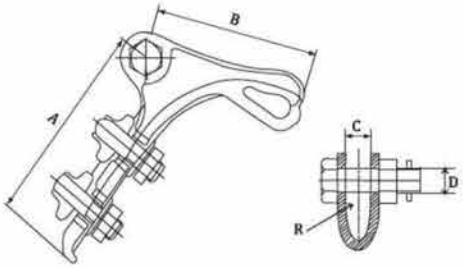
4.4.2 Strain clamp(bolt type)



HE Code	Applicable Conductor (mm)	Main dimensions (mm)		U bolt		Specified failure load(kN)
		c	M	M	No.	
HESCL-1	8.0-12.0	18	16	12	2	60
HESCL-2	12.0-16.0	18	16	12	2	60
HESCL-3	16.0-18.0	27	16	14	3	80
HESCL-4	18.0-22.5	30	18	14	3	80
HESCL-27	12.48-21.66	27	18	16	4	90
HESCL-5	22.5-29.0	36	22	16	4	120
HESCL-6	26.0-32.7	42	22	18	4	120

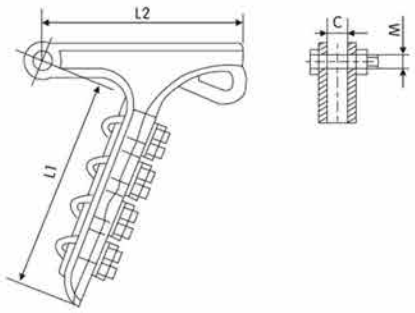
HESCL series is suitable for aerial line up to 220 kV, fixing aluminum wire or steel core aluminum wire on the strain pole.

4.4.3 Strain clamp(bolt type)



HE Code	Conductor range (mm)	Dimensions(mm)					U-bolt		Failure load	Wt.
		A	B	C	D	R	No.	Dia.	kN	kg
SCS-1	5.0-10.0	150	120	18	16	6.5	2	12	20	1.3
SCS-2	10.1-14	205	130	18	16	8	3	12	40	2.1
SCS-3	14.1-18	310	160	20	18	11	4	16	70	4.6
SCS-4	18.1-23	410	220	25	18	12.5	5	16	90	7.1
SCS-4B	18.1-23	370	200	27	18	12.5	4	16	90	

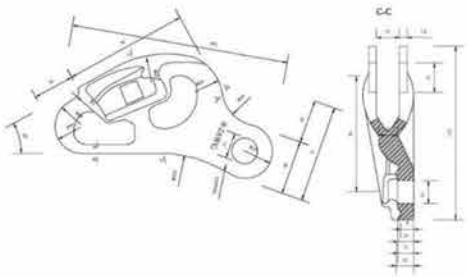
The clamp body and keepers are malleable iron,
the closed-pin stainless steelwork,
the other parts are steel.



HE Code.	Suitable Conductor Dia.(mm)	Dimensions(mm)				U bolt	Specified failure load(kN)	Weight (kg)
		M	C	L1	L2			
HESCT-1	5.1~11.4	16	19	126	108	2 x M12	40	2
HESCT-2	8.9-18.5	16	14	176	187	2 x M12	40	3.6
HESCT-3	5.0-15.0	16	17.5	190	203	3 x M12	70	3.8
HESCT-4	12.1-21.8	16	30	298	284	4 x M14	90	10
HESCT-S	18.0-30.0	22	36	446	342	S x M16	120	15

The clamp body and keepers are malleable iron, the closed-pin stainless steelwork. The other parts are steel.

4.4.4 Casted tension clamp



Casted tension clamp is used for provide tension strength for overhead conductor. Each clamp is assembled with one bolt sets for fixing as well as another bot set with plated clamp

HE Code	Suitable cable dia.
HESC-8050	8-2/0AWG

Hot dip galvanized clamp body; galvanized steel for bolts.

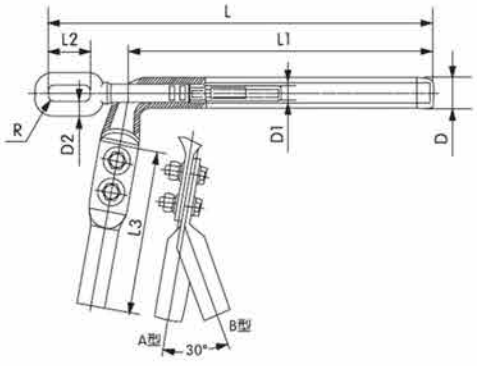
4.4.5 Compression Strain Clamps

NY hydraulic strain clamps are produced to tension AAC and AAAC. They hold force in the direction of conductors.
Each clamp is assembled with bolt sets for fixing jumper terminals.

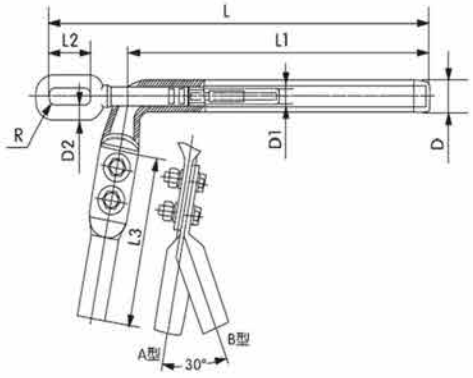
HE Code	Suitable cable dia.
HENY-100H	AAAC Ø12.75mm
HENY-125H	AAAC Alliance Ø14.31mm
HENY-160H	AAAC Butte Ø16.3mm
HENY-160H-4P	AAAC Butte Ø16.3mm
HENY-200H	AAAC Canton Ø18.31mm
HENY-200H-4P	AAAC Canton Ø18.31mm
HENY-236H	AAAC Ø19.9mm
HENY-240H	AAAC Cairo Ø19.88mm
HENY-240H-4P	AAAC Cairo Ø19.88mm
HENY-280H	AAAC Darien Ø21.79mm
HENY-330H	AAAC Elgin Ø23.55mm
HENY-375H	AAAC Flint Ø25.15mm
HENY-470-160H	AAAC Greeley Ø28.15mm(Main)
	AAAC Butte Ø16.3mm(Terminal)
HENY-485H	AAAC Greeley Ø28.15mm
HENY-770H	AAAC Ø36.9mm
HENY-375L	AAC VIOLET Ø24.73mm
HENY-400L	AAC 400SQM Ø25.9mm
HENY-400L-D	AAC 400SQM Ø25.9mm
HENY-485L	AAC Magnolia Ø28.55mm
HENY-770L	AAC Coreopsis Ø36.9mm
HENY-805A	AAC Ø35-37mm
HENYC-887L	AAC Ø38.7mm
HENYC-1140L	AAC Ø43.9mm
HENY-1000L	AAC Cowslip Ø41.4mm
HENY-1140L	AAC Sagebrush Ø43.9mm
HENY-1400L	AAC Lupine Ø43.9mm
HENY-1450L	AAC Bitterrot Ø48.62mm
HENY-355R	ACAR 700MCM Ø24.5mm
HENY-600R	ACAR 1200MCM Ø32.1mm
HENY-645-80	ACSR Pheasant Ø35.1mm

Aluminum for clamp body; galvanized steel for bolts.

4.4.5.1 Strain clamps (Steel anchor welding type)

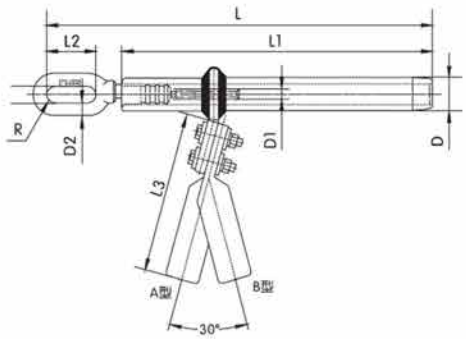


HE Code	Suitable Conductor	Dimensions(mm)								Grip Strength (kN)
		L	L1	L2	L3	D	D1	D2	R	
HENYG-508	LGJ-50/8	355	250	55	190	26	12	16	10	16.1
HENYG-5030	LGJ-50/30	405	300	55	190	30	14	16	10	40.5
HENYG-7010	LGJ-70/10	385	280	55	200	26	12	16	10	22.3
HENYG-7040	LGJ-70/40	455	350	55	200	32	18	16	10	55.4
HENYG-9515	LGJ-95/15	385	280	55	205	26	14	16	10	33.3
HENYG-9520	LGJ-95/20	385	280	55	205	26	14	16	10	35.4
HENYG-9555	LGJ-95/55	485	380	55	205	34	20	18	11	74.2
HENYG-1207	LGJ-120/7	385	280	55	205	30	12	16	10	26.2
HENYG-12020	LGJ-120/20	405	300	55	205	30	14	16	10	39
HENYG-12025	LGJ-120/25	425	320	55	205	30	14	16	10	45.5
HENYG-12070	LGJ-120/70	535	420	65	215	36	22	18	11	93.5
HENYG-1508	LGJ-150/8	400	295	55	210	30	12	16	10	31.3
HENYG-15020	LGJ-150/20	425	320	55	210	30	14	16	10	44.3
HENYG-15025	LGJ-150/25	435	330	55	210	30	14	16	10	51.4
HENYG-15035	LGJ-150/35	455	350	55	210	30	16	16	10	61.8
HENYG-18525	LGJ-185/25	455	350	55	230	32	14	16	10	56.5
HENYG-18530	LGJ-185/30	455	350	55	230	32	16	16	10	61.1



HE Code	Suitable Conductor	Dimensions(mm)								Grip Strength (kN)
		L	L1	L2	L3	D	D1	D2	R	
HENYG-18545	LGJ-185/45	475	370	55	230	32	18	18	11	76.2
HENYG-24030	LGJ-240/30	495	390	55	230	36	16	18	11	71.9
HENYG-24040	LGJ-240/40	495	390	55	250	36	16	18	11	79.2
HENYG-24055	LGJ-240/55	540	420	65	250	36	20	20	12	97
HENYG-30015	LGJ-300/15	485	380	55	250	40	14	16	10	64.7
HENYG-30020	LGJ-300/20	495	390	55	265	40	14	18	11	71.9
HENYG-30025	LGJ-300/25	505	400	55	265	40	14	18	11	79.3
HENYG-30040	LGJ-300/40	525	420	55	265	40	16	18	11	87.6
HENYG-30050	LGJ-300/50	550	430	65	265	40	18	20	12	98.3
HENYG-30070	LGJ-300/70	585	460	70	265	42	22	22	13	121.6
HENYG-40020	LGJ-400120	545	440	55	270	45	14	18	11	84.4
HENYG-40025	LGJ-400125	545	440	55	270	45	14	18	11	91.2
HENYG-40035	LGJ-400/35	560	440	65	270	45	16	20	12	98.7
HENYG-40050	LGJ-400/50	585	460	70	270	45	20	22	13	117.3
HENYG-40065	LGJ-400/65	608	480	70	270	48	22	22	13	128.5
HENYG-40095	LGJ-400/95	663	520	80	270	48	26	24	15	162.8

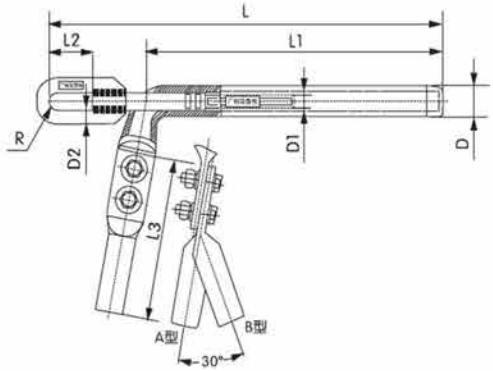
HE Code	Suitable Conductor	Dimensions(mm)								Grip Strength (kN)
		L	L1	L2	L3	D	D1	D2	R	
HENYG-50035	LGJ-500/35	590	480	70	260	52	16	22	13	113.6
HENYG-50045	LGJ-500/45	590	480	70	260	52	18	22	13	121.7
HENYG-50065	LGJ-500/65	620	510	70	260	52	22	22	13	146.3
HENYG-63045	LGJ-630/45	610	490	80	290	60	18	22	15	141.3
HENYG-63055	LGJ-630/55	635	510	80	290	60	20	24	15	156.2
HENYG-63080	LGJ-630/80	675	550	80	290	60	24	24	15	183.3
HENYG-80055	LGJ-800/55	725	580	100	335	65	20	26	17	182.0
HENYG-80070	LGJ-800/70	775	630	100	335	65	22	26	17	196.7
HENYG-800100	LGJ-800/100	775	630	100	335	65	26	26	17	229.0



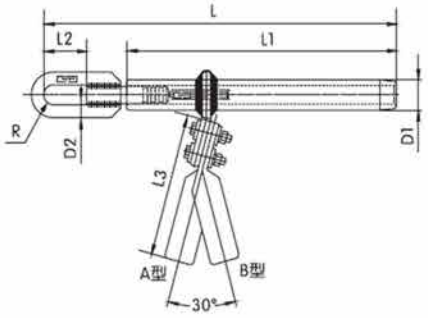
HE Code	Suitable Conductor	Dimensions(mm)						Grip Strength (kN)
		L	L2	D	D1	D2	R	
HENYJ-18530	JL/G1A-185/30	450	65	32	16	16	10	61.3
HENYJ-24030	JL/G1A-240/30	490	65	36	16	18	11	71.4
HENYJ-24040	JL/G1A-240/40	490	65	36	16	18	11	79.6
HENYJ-30025	JL/G1A-300/25	505	70	40	14	18	11	79.6
HENYJ-30040	JL/G1A-300/40	525	70	40	16	18	12	87.7
HENYJ-40035	JL/G1A-400/35	565	78	45	16	20	13	98.5
HENYJ-40050	JL/G1A-400/50	590	78	45	20	22	13	116.9

HE Code	Suitable Conductor	Dimensions(mm)						Grip Strength (kN)
		L	L2	D	D1	D2	R	
HENYJ-50045	JL/G1A-500/45	680	78	52	18	22	13	120.9
HENYJ-63045	JL/G1A-630/45	705	80	60	18	22	15	142.9
HENYJ-63055	JL/G1A-630/55	715	80	60	20	24	15	156.1

4.4.5.2 Strain clamps (Steel anchor welding type)



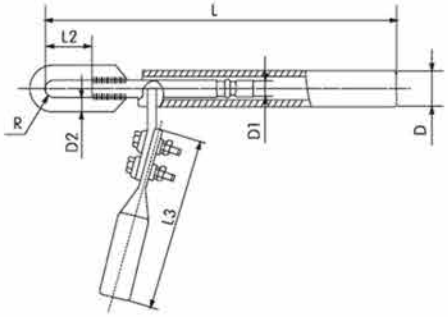
HE Code	Suitable Conductor	Dimensions(mm)								Grip Strength (kN)
		L	L1	L2	L3	D	D1	D2	R	
HEYGH-508	LGJ-50/8	375	250	55	190	26	12	16	9	16.1
HEYGH-5030	LGJ-50/30	425	300	55	190	30	14	16	9	40.5
HEYGH-7010	LGJ-70/10	405	280	55	200	26	12	16	9	22.3
HEYGH-7040	LGJ-70/40	475	350	55	200	32	18	16	10	55.4
HEYGH-9515	LGJ-95/15	405	280	55	205	26	14	16	9	33.3
HEYGH-9520	LGJ-95/20	405	280	55	205	26	14	16	9	35.4
HEYGH-9555	LGJ-95/55	505	380	55	205	34	20	18	11	74.2
HEYGH-1207	LGJ-120/7	405	280	55	205	30	12	16	9	26.2
HEYGH-12020	LGJ-120/20	425	300	55	205	30	14	16	9	39
HEYGH-12025	LGJ-120/25	445	320	55	205	30	14	16	9	45.5
HEYGH-12070	LGJ-120/70	555	420	65	215	36	22	18	11	93.5
HEYGH-1508	LGJ-150/8	420	295	55	210	30	12	16	9	31.3
HEYGH-15020	LGJ-150/20	445	320	55	210	30	14	16	9	44.3
HEYGH-15025	LGJ-150/25	455	330	55	210	30	14	16	9	51.4
HEYGH-15035	LGJ-150/35	475	350	55	210	30	16	16	10	61.8
HEYGH-18525	LGJ-185/25	475	350	55	230	32	14	16	10	56.5
HEYGH-18530	LGJ-185/30	475	350	55	230	32	16	16	10	61.1
HEYGH-18545	LGJ-185/45	495	370	55	230	32	18	18	11	76.2
HEYGH-24030	LGJ-240/30	515	390	55	230	36	16	18	11	71.9
HEYGH-24040	LGJ-240/40	515	390	55	250	36	16	18	11	79.2
HEYGH-24055	LGJ-240/55	565	420	65	250	36	20	20	12	97
HEYGH-30015	LGJ-300/15	505	380	55	250	40	14	16	11	64.7
HEYGH-30020	LGJ-300/20	515	390	55	265	40	14	18	12	71.9
HEYGH-30025	LGJ-300/25	525	400	55	265	40	14	18	12	79.3
HEYGH-30040	LGJ-300/40	545	420	55	265	40	16	18	12	87.6
HEYGH-30050	LGJ-300/50	575	430	65	265	40	18	20	12	98.3
HEYGH-30070	LGJ-300/70	610	460	70	265	42	22	22	13	121.6
HEYGH-40020	LGJ-400/20	565	440	55	270	45	14	18	13	84.4
HEYGH-40025	LGJ-400/25	565	440	55	270	45	14	18	13	91.2
HEYGH-40035	LGJ-400/35	585	440	65	270	45	16	20	13	98.7
HEYGH-40050	LGJ-400/50	610	460	70	270	45	20	22	14	117.3
HEYGH-40065	LGJ-400/65	635	480	70	270	48	22	22	14	128.5
HEYGH-40095	LGJ-400/95	700	520	80	270	48	26	24	15	162.8



HE Code	Suitable Conductor	Dimensions(mm)								Grip Strength (kN)
		L	L1	L2	L3	D	D1	D2	R	
HEYGH-50035	LGJ-500/35	610	480	70	260	52	16	22	15	113.6
HEYGH-50045	LGJ-500/45	610	480	70	260	52	18	22	15	121.7
HEYGH-50065	LGJ-500/65	645	510	70	260	52	22	22	15	146.3
HEYGH-63045	LGJ-630/45	635	490	80	290	60	18	22	17	141.3
HEYGH-63055	LGJ-630/55	665	510	80	290	60	20	24	17	156.2
HEYGH-63080	LGJ-630/80	705	550	80	290	60	24	24	17	183.3
HEYGH-80055	LGJ-800/55	755	580	100	335	65	20	26	19	182
HEYGH-80070	LGJ-800/70	805	630	100	335	65	22	26	19	196.7
HEYGH-800100	LGJ-800/100	805	630	100	335	65	26	26	19	229

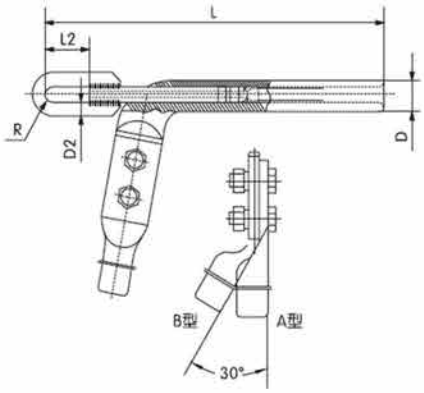
The clamp body and jumper are aluminum, The other parts are hot-dip galvanized steel.

4.4.5.3 Strain clamp (hydraulic compression type)



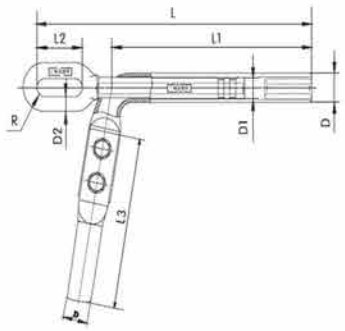
HE Code	Suitable Conductor	Dimensions(mm)							Grip Strength (kN)	Weight (kg)
		L	L2	L3	D	D1	D2	R		
HENY-240Q	LGJQ-240	420	55	255	38	22	16	11	66	2.24
HENY-300Q	LGJQ-300	410	55	265	40	22	18	12	80	2.75
HENY-400Q	LGJ0400	505	70	280	45	24	18	12	103	3.58
HENY-500Q	LGJQ-500	540	78	245	52	28	20	14	129	4.35
HENY-600Q	LGJQ-600	560	80	290	55	33	22	15	151	5.5
HENY-700Q	LGJQ-700	575	80	290	60	36	24	18	180	6.3

4.4.5.4 Strain clamp (hydraulic compression type)



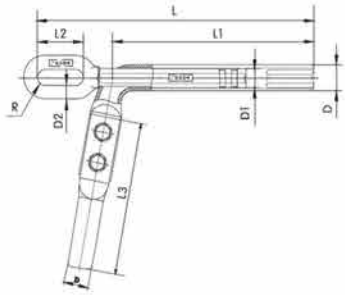
HE Code .	Suitable Conductor	Dimensions(mm)					Grip Strength (kN)	Weight (kg)
		L	L2	D	D2	R		
HENB-7040A(B)	LGJ-70/40	355	55	32	16	9	55	2.2
HENB-9555A(B)	LGJ-95/55	400	55	34	18	11	74	2.3
HENB-12020A(B)	LGJ-120/20	370	55	30	14	0	39	1.5
HENB-12070A(B)	LGJ-120/70	460	70	36	18	12	93	2.7
HENB-15025A(B	LGJ-150/25	355	55	30	16	0	51	1.7
HENB-18525A(B)	LGJ-185/25	450	55	34	16	10	56	1.8
HENB-18530A(B)	LGJ-185/30	450	55	34	16	10	61	1.9
HENB-24030A(B)	LGJ-240/30	420	55	36	16	11	72	2.1
HENB-24040A(B)	LGJ-240/40	420	55	36	18	11	79	2.2
HENB-30015A(B)	LGJ-300/15	400	55	40	16	11	65	2.7
HENB-30020A(B)	LGJ-300/20	410	55	40	16	10	72	2.8
HENB-30025A(B)	LGJ-300/25	420	55	40	16	11	79	2.9
HENB-30040A(B)	LGJ-300/40	410	55	40	18	11	88	2.9
HENB-30050A(B)	LGJ-300/50	470	55	40	18	12	98	3.2
HENB-30070A(B)	LGJ-300/70	480	65	42	20	12	122	3.4
HENB-40025A(B)	LGJ-400/25	450	65	45	18	12	91	3.5
HENB-40035A(B)	LGJ-400/35	470	65	45	20	12	99	3.5
HENB-40050A(B)	LGJ-400/50	470	65	45	20	12	117	3.6
HENB-40065A(B)	LGJ-400/65	490	70	48	20	13	128	4.3
HENB-40095A(B)	LGJ-400/95	540	80	48	22	14	163	5.1
HENB-50035A(B)	LGJ-500/35	470	70	52	20	14	114	5.4
HENB-50045A(B)	LGJ-500/45	470	70	52	20	14	122	5.7
HENB-63045A(B)	LGJ-630/45	530	80	60	22	16	141	6.5

4.4.5.5 Strain clamp for A.S stranded wire (hydraulic compression type)



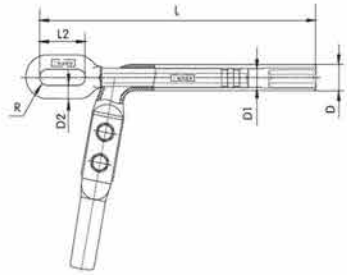
Strain clamps (Steel anchor welding type)

HE Code	Suitable Conductor	Dimensions(mm)								Grip Strength (kN)	Weight (kg)
		L	L1	L2	L3	D	D1	D2	R		
HENY-35BG	JLB20A-35	325	230	55	200	32	18	16	10	35.3	1.92
HENY-50BG	JLB20A-50	345	250	55	200	32	18	16	10	50.8	1.96
HENY-65BG	JLB20A-65	390	285	65	210	36	22	18	11	65.5	2.71
HENY-70BG	JLB20A-70	390	285	65	210	36	22	18	11	69.3	2.76
HENY-80BG	JLB20A-80	435	325	65	210	36	24	18	11	76	3.15



HE Code	Suitable Conductor	Dimensions(mm)								Grip Strength (kN)	Weight (kg)
		L	L1	L2	L3	D	D1	D2	R		
HENY-95BG	JLB20A-95	450	340	65	218	36.2	26	18	11	85.9	3.75
HENY-100BG1	JLB20A-100	465	340	78	250	40	28	20	13	103.5	4.34
HENY-100BG2	JLB30A-100	435	325	65	210	36	24	18	11	68	3.25
HENY-120BG1	JLB20A-120	465	340	78	250	42	30	22	13	124.3	5
HENY-120BG2	JLB30A-120	450	340	65	250	40	26	18	11	81.6	3.75
HENY-150BG1	JLB20A-150	535	390	85	260	45	32	24	15	151.8	6.62
HENY-150BG2	JLB30A-150	465	340	78	250	40	28	20	13	99.7	4.34
HENY-185BG1	JLB20A-185	575	435	85	260	48	34	24	15	117.6	7.92
HENY-185BG2	JLB30A-185	465	340	78	250	42	30	22	13	123.1	5.1

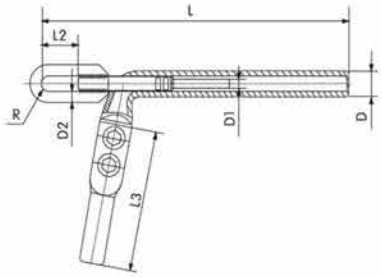
The clamp body and jumper are aluminum. The other parts are hot-dip galvanized steel.



HE Code	Suitable Conductor	Dimensions(mm)						Grip Strength (kN)	Weight (kg)
		L	L2	D	D1	D2	R		
NYBG-8020	JLB20A-80	435	70	36	24	18	12	85	2.5
NYBG-8035	JLB35-80	435	65	36	24	18	12	53.4	2.5
NYBG-8040	JLB40-80	435	65	36	24	18	12	46.6	2.5
NYBG-10020	JLB20A-100	455	80	38	26	20	12	116	3.7
NYBG-10035	JLB35-100	435	70	38	26	20	12	68.1	3.2
NYBG-10040	JLB40-100	435	70	38	26	20	12	59.6	2.9
NYBG-12020	JLB20A-120	490	80	42	30	22	13	139	3.8
NYBG-12035	JLB35-120	450	70	36	24	18	12	81.9	2.5
NYBG-12040	JLB40-120	450	70	36	24	18	12	715	2.7
NYBG_15020	JLB20A-150	460	80	45	32	26	16	170	7.3
NYBG-15035	JLB35-150	445	80	38	26	18	12	100	3.2
NYBG-15040	JLB40-150	445	70	38	26	18	12	87.4	3.2

The clamp body and jumper are aluminum. The other parts are hot-dip galvanized steel.

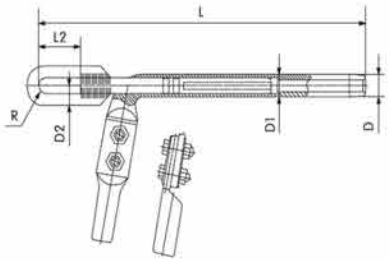
4.4.5.6 Strain clamp for ACSR/AS Conductor (hydraulic compression type)



HE Code	Suitable Conductor	Dimensions(mm)							Grip Strength (kN)	Weight (kg)
		L	L2	L3	D	D1	D2	R		
YLG-7040	ACSR/AS-70/40	480	50	220	34	16	16	9	57.8	0.4
YLG-8047	ACSR/AS-80/47	475	70	230	36	18	16	10	64.6	3.1
YLG-9555	ACSR/AS-95/55	486	65	230	36	20	18	11	74	2.9
YLG-18530	ACSR/AS-185/30	540	55	220	36	16	16	9	62.9	2.9
YLG-24040	ACSR/AS-240/40	595	65	240	38	18	18	12	81.6	3.3
YLG-30025	ACSR/AS-300/25	560	55	265	42	18	18	11.5	74.4	3.6
YLG-30040	ACSR/AS-300/40	615	70	265	42	18	18	13	90	3.8
YLG-30050	ACSR/AS-300/50	620	70	265	42	18	18	13	101	4.1
YLG-30070	ACSR/AS-300/70	625	70	265	42	22	22	13	117.8	4.4
YLG-40035	ACSR/AS-400/35	635	65	280	48	18	18	13	99	5.2
YLG-40050	ACSR/AS-400/50	645	65	280	48	20	20	13		5.2

The clamp body and jumper are aluminum. The other parts are hot-dip galvanized steel.

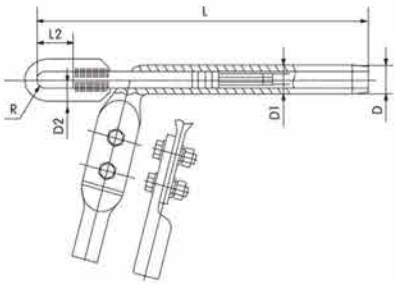
4.4.5.7 Strain camps for HRAAS conductor(hydraulic compression type)



HE Code	Suitable Conductor	Dimensions(mm)						Grip Strength (kN)	Weight (kg)
		L	L2	D	D1	D2	R		
YRL-18530	NRLH$^{50}_{60}$GJ-185/30	545	55	36	16	16	10	59	4.3
YRL-24030	NRLH$^{50}_{60}$GJ-240/30	545	55	45	18	18	10	69.5	4.4
YRL-24040	NRLH$^{50}_{60}$GJ-240/40	545	70	45	18	18	10.5	76.5	4.4
YRL-30040	NRLH$^{50}_{80}$GJ-300/40	575	65	50	18	18	12	85.4	6.5
YRL-30050	NRLH$^{50}_{60}$GJ-300/50	575	65	50	18	18	12	96	6.5
YRL-40035	NRLH$^{50}_{80}$GJ-400/35	605	65	55	18	20	13.5	93.6	7.3
YRL-40050	NRLH$^{50}_{60}$GJ-400/50	635	65	55	20	20	13.5	112	7.5
YRL-50035	NRLH$^{50}_{60}$GJ-500/35	728	70	65	20	20	14	108.3	7.9
YRL-50045	NRLH$^{50}_{60}$GJ-500/45	645	70	65	20	20	14	117.1	8.1
YRL-63045	NRLH$^{50}_{60}$GJ-630/45	770	80	70	20	22	16	133.6	8.6

The clamp body and jumper are aluminum. The other parts are hot-dip galvanized steel.

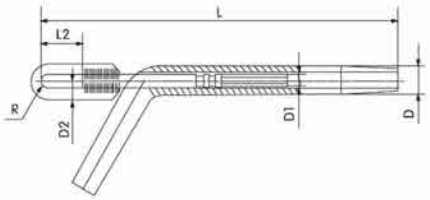
4.4.5.8 Strain clamps for AACSR conductor (hydraulic compression type)



HE Code	Suitable Conductor	Dimensions(mm)						Grip Strength (kN)	Weight (kg)
		L	L2	D	D1	D2	R		
YGL-7040	LHBGJ-70/40	440	55	36	18	16	11	63.4	3
YGL-12070	LHBGJ-120/70	555	55	36	24	16	13	108.8	3.7
YGL-24030	LHBGJ-240/30	644	78	45	23	22	12	101	5
YGL-30050	LHBGJ-300/50	670	75	50	20	22	13	136.4	6.4
YGL-30070	LHBGJ-300/70	680	80	52	24	24	14	168	6.7

The clamp body and jumper are aluminum. The other parts are hot-dip galvanized steel.

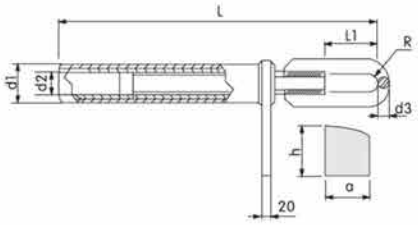
4.4.5.9 Strain clamps



HE Code	Suitable Conductor	Dimensions(mm)						Grip Strength (kN)	Weight (kg)
		L	L2	D	D1	D2	R		
YSC-7040	LGJ-70/40	390	55	32	18	16	10	55	2.2
YSC-15025	LGJ-150/25	400	55	30	14	16	8.5	52	2.1
YSC-24040	LGJ-240/40	515	55	36	16	18	11	79	2.6
YSC-30025	LGJ-300/25	570	55	40	14	18	11	79	3.4
YSC-30040	LGJ-300/40	575	55	40	16	18	11	88	3.4
YSC-40035	LGJ-400/35	620	55	45	16	20	12	89	3.8
YSC-40050	LGJ-400/50	620	65	45	20	20	12	117	3.9

The clamp body and jumper are aluminum. The other parts are hot-dip galvanized steel.

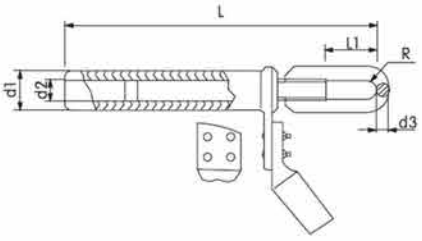
4.4.5.10 Strain clamps for welding hydraulic compression type



HE Code	Main dimensions(mm)								Grip Strength (kN)	Weight (kg)
	d1	d2	d3	L	L1	R	a	h		
HYH-600K	76		20	510	75	15	120	120	107	7.4
HYH-900K	70		24	545	85	15	120	120	137	7
HYH-1400K	76		24	640	70	20	150	150	188	7.3
HYH-1400120	76	30	24	690	70	20	120	120	294	10.2
HYH-1400135	76	30	24	740	100	20	120	120	313	10.2
HYH-50065N	60	22	22	660	70	15	125	125	96	9.5
HYH-630N	70	24	26	710	80	17	125	125	122	8.5
HYH-1000125N	76	32	24	720	85	21	150	150	188	12
HYH-1440120N	80	34	24	760	100	20	150	150	210	11.8
HYH-1440135N	80	34	24	740	100	20	150	150	313	11.8

The clamp body are aluminum, the other parts are hot-dip galvanized steel.

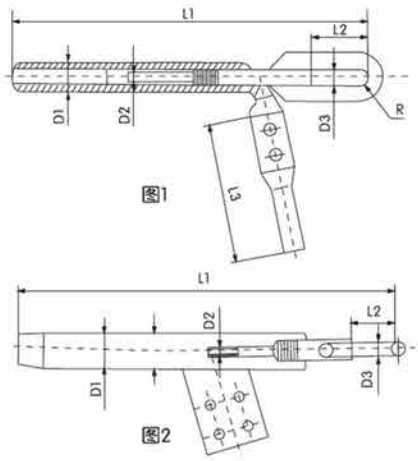
4.4.5.11 Strain Calmps For Welding Hydraulic Compression Type



HE Code	Main dimensions(mm)						Grip Strength (kN)	Weight (kg)
	d1	d2	d3	L	L1	R		
HYH-600K2	76		20	510	75	15	107	7.4
HYH-900K2	70		24	545	85	15	137	7
HYH-1400K2	76		24	640	70	20	188	7.3
HYH-1400120-2	76	30	24	690	70	20	294	10.2
HYH-1400135-2	76	30	24	740	100	20	313	10.2
HYH-50065N-2	60	22	22	660	70	15	96	9.5
HYH-630N2	70	24	26	710	80	17	122	8.5
HYH-1000125N2	76	32	24	720	85	21	188	12
HYH-1440120N2	80	34	24	760	100	20	210	11.8
HYH-1440135N2	80	34	24	740	100	20	313	11.8

The clamp body are aluminum, the other parts are hot-dip galvanized steel.

4.4.5.12 Strain clamps for heat-resistant aluminum alloy Conductor hydraulic Compression type.



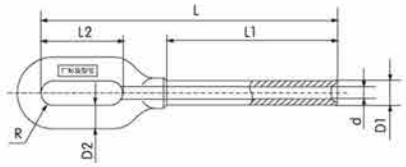
HE Code	Main dimensions (mm)							Grip Strength (kN)	Weight (kg)
	D1	D2	D3	R	L1	L2	L3		
YRA-18530	36	16	16	10	545	55	245	4.2	1
YRA-24030	45	18	18	10	545	55	295	4.4	1
YRA-24040	45	18	18	10.5	610	60	295	4.4	1
YRA-30040	50	18	18	12	575	65	325	6.5	1
YRA-30050	50	18	18	12	575	65	325	6.5	1
YRA-40035	55	18	20	13.5	605	65	340	7.5	1
YRA-40050	55	20	20	13.5	605	65	340	7.6	1
YRA-50045	65	20	20	14	615	70	170	8.1	2
YRA-50070	65	22	26	17	645	90	357	8.3	2
YRA-63045	70	20	22	16	690	70	365	8.6	2
YRA-63080	70	26	26	17	720	80	365	8.8	2
YRA-80055	72	20	26	19	750	80	345	9	2

The clamp body are aluminum, the other parts are hot-dip galvanized steel.

4 Clamps

4.4.6 Strain clamps for steel wire strand(comperssion type)

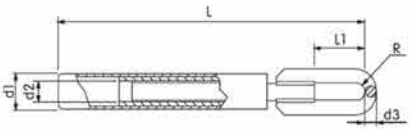
Strain clamps for steel wire (monobloc forging type)



HE Code	Suitable Conductor(mm)	Main dimensions(mm)							Grip Strength (kN)
		L	L1	L2	D1	D2	d	R	
NSG-35	7.8	210	115	55	16	16	8.4	9	45
NSG-50	9	220	130	50	18	16	9.7	9	60
NSG-55	9.6	230	140	50	20	16	10.2	10	70
NSG-70	11	255	155	55	22	18	11.7	11	88
NSG-80	11.5	275	175	55	24	18	12.2	12	90
NSG-l00	13	295	185	65	26	20	13.5	13	123
NSG-120	14	315	195	70	28	22	14.7	14	143
NSG-135	15	340	215	70	30	22	15.7	15	164
NSG-150	16	380	230	90	32	24	16.7	16	187

Hot-dip galvanized steel.

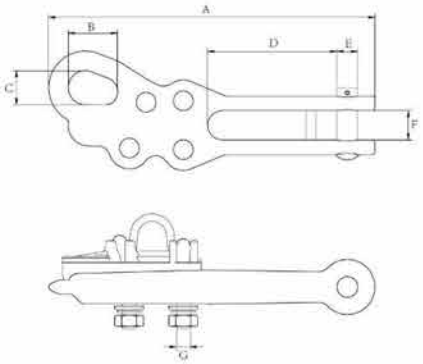
4.4.7 Terminal strain clamps



HE Code	Suitable Conductor (mm)	Main dimensions (mm)						Grip Strength (kN)	Weight (kg)
		d1	d2	d3	L	L1	R		
TNZ-600K	LGKK-600	76		2	450	70	15	100	6.5
TNZ-900K	LGKK-900	74		24	470	85	15	136	5.5
TNZ-1400K	LGKK-1400	84		24	620	100	2	188	
TNZ-1400120	LGJQT-1400/120	78	30	24	540	100	2	214	6.8
TNZ-1400135	LGJQT-1400/135	78	30	24	540	100	20	232	6.8
TNZ-1440120N	NAHLGJQ-1440/120	80	34	24	660	100	20	210	11
TNZ-1440135N	NAHLGJQ-1440/135	80	34	24	660	100	20	228	11

The clamp body are aluminum. The other parts are hot-dip galvanized steel.

4.4.8 Straight line Strain Clamps

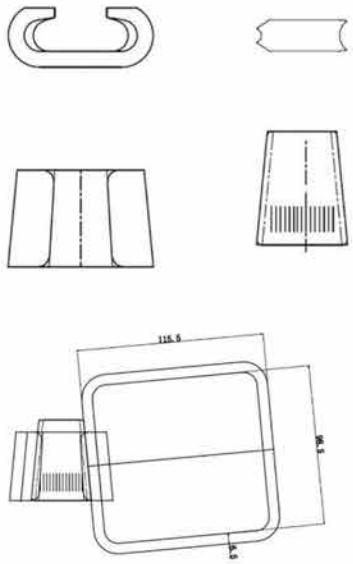


Deadend strain clamps are produced to provide high holding power without damaging wires.

HE Code	Suitable Conductor (mm)	Main dimensions (mm)							Min failing load (LBS)
		A	B	C	D	E	F	G	
HEDC-1	4-11	245	40	28	90	16	19	10	7000
HEDC-2	9-18	280	33	23	97	16	20	12	12000
HEDC-3	11-22	266	40	28	105	16	23.5	14	15000
HEDC-4	16-32	303	40	28	131	16	25	16	17500
HEDC-5	18-40	346	48	33	144	16	25	16	17500

Aluminum for clamp body; galvanized steel for U bolt and cotter pins; stainless steel for split pins.

4.5 Wedge Clamp

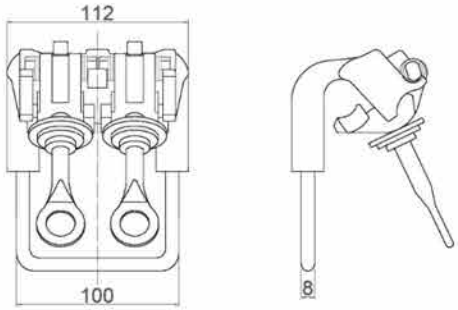


Amp wedge clamp is a kind of tension free connection fittings for power system, designed for the connection between stranded copper wires in polluted areas. It can be used for the connection of AAAC, ACSR, AAC, ACAR conductors of the same (different) diameter.

HE Code	Conductor Range 1(mm^2)	Conductor Range 1(mm^2)	
HEJX-D1	35-50	35-50	JXL-1
HEJX-D2	70-95	35-50	JXL-1
HEJX-D3	70-95	70-95	JXL-1
HEJX-D4	120-150	35-50	JXL-2
HEJX-D5	120-150	70-95	JXL-2
HEJX-D6	120-150	120-150	JXL-2
HEJX-D7	185-240	35-50	JXL-3
HEJX-D8	185-240	70-95	JXL-3
HEJX-D9	185-240	120-150	JXL-3
HEJX-D10	185-240	185-240	JXL-3

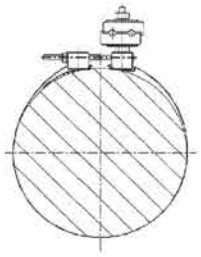
Raw material: Aluminum alloy
Finish: Plain

4.6 Stirrup Clamp

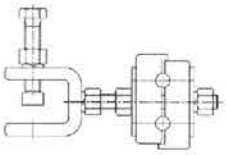


HE Code: HESTP
Material: Body-Aluminum Alloy
Weight:0.792kg
Suitable wire range: 8-20mm^2

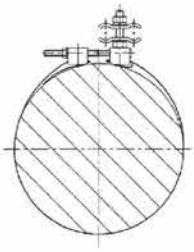
4.7 Down Lead Clamp



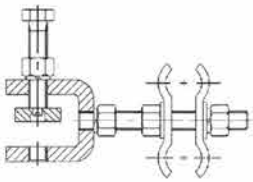
Down Lead Clamp
for rubber type pole



Down Lead Clamp
for rubber type pole



Down Lead Clamp
for metal type pole

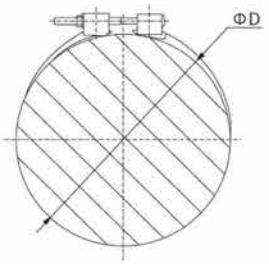


Down Lead Clamp
for metal type pole

Product name	Model		Suitable cable dia. (mm)	Weight (kg)	Remark
Down Lead Clamp for Rubber type tower	TGY	1110-T	9.00-11.1	0.85	For ADSS optical cable
	TGY	1330-T	11.2-13.3	0.85	For ADSS optical cable
	TGY	1550-T	13.4-15.5	0.85	For ADSS optical cable
	TGY	1800-T	15.6-18.0	0.85	For ADSS optical cable
Down Lead Clamp for Metal type tower	TGY	240-T	8.50-24.0	0.85	For OPGW optical cable
Down Lead Clamp for rubber type pole	TGY	1110-H*	9.00-11.1	0.95	For ADSS optical cable
	TGY	1330H*	11.2-13.3	0.95	For ADSS optical cable
	TGY	1550H*	13.4-15.5	0.95	For ADSS optical cable
	TGY	1800H*	15.6-18.0	0.95	For ADSS optical cable
Down Lead Clamp for Metal type pole	TGY	240H*	8.50-24.0	0.95	For OPGW optical cable

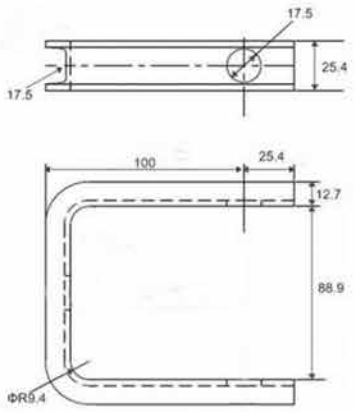
Comparison table of stainless steel band hoops and applicable rod diameter ranges

Catalog No.	H1	H2	H3	H4	H5
Applicable maximum rod diameter D(mm)	310	460	600	800	1000
Weight (kg)	0.45	0.5	0.55	0.6	0.7



Clevis

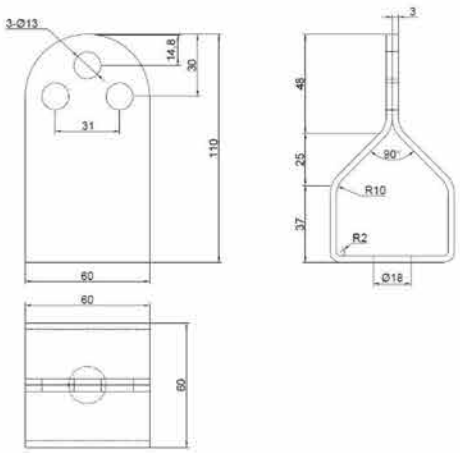
5.1 Channel Clevis



Channel clevises are produced for use with insulators.
Economical secondary clevises are for use with standard spool insulators, are to handle high strength on line pulls or deadends.
Clevises are assembled with a cotter bolt or cotter pin and a stainless steel split pin.
Clevises are also available assembled with a porcelain spool upon request.
A square mounting hole is for mounting a cotter bolt or a carriage or machine bolt.
Clevises are constructed of high quality channel steel, hot dipped galvanized.

HE Code
CC-1

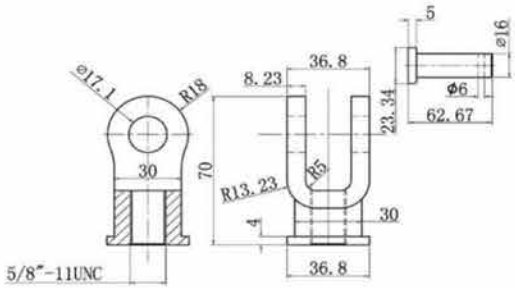
5.2 Deadending Clevis



Deadending clevises without a spool are produced to deadend suspension insulators and guyings with extension link fittings.

HE Code: HEDEC
Material steel is hot dip galvanized to ASTM A153.
Clevises are assembled with 5/8" cotter bolts or cotter pins.

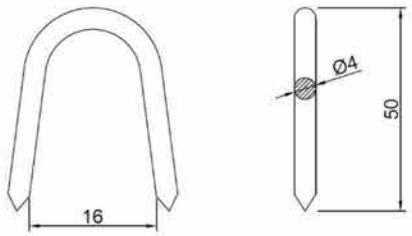
5.3 Eyenut Clevis



HE Code
ENC-1

Raw material: ASTM A536
Finish: hot dip galvanized

5.4 Staples

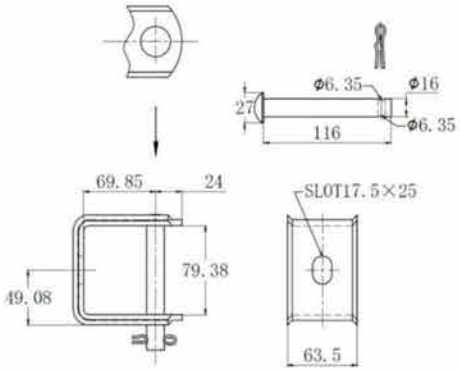


Staples are usually used to secure ground wires and ground wire molding to wood poles.

HE Code	Dia.
HEUN-04	M4

Material steel is hot dip galvanized to ASTM A153.
Type: rolled, diamond point

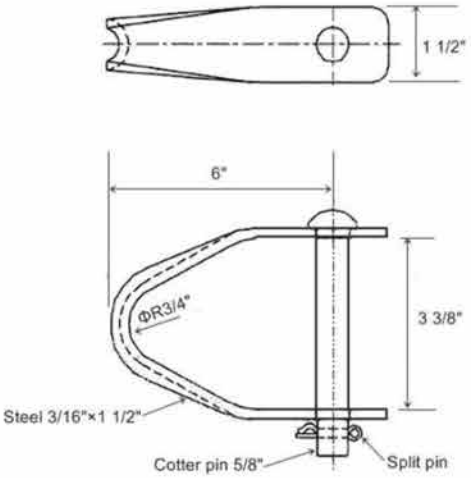
5.5 Straight Clevis



HE Code
SC-1

Raw material: ASTM A536
Finish: hot dip galvanized

5.6 Swinging Clevis



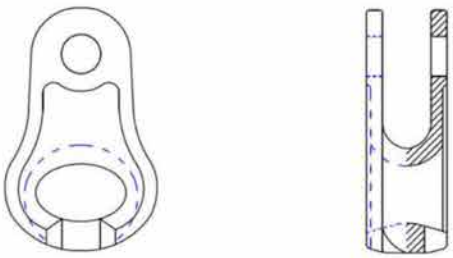
Swinging clevises are produced to balance the strain when mounting at corners. Cotter bolts allows a special twist lock head to tighten into place at the top of the bracket.

HE Code	Dimensions				Wt.
	Steel	Pin dia.	Mounting hole	Cotter pin	kg
SWC-1	3/16"*1 1/2"	5/8"	11/16"	5/8'×4"	0.68

Material steel is hot dip galvanized to ASTM A153 for corrosion resistance.

5.7 Thimble Clevis

5.7.1 Thimble Clevis

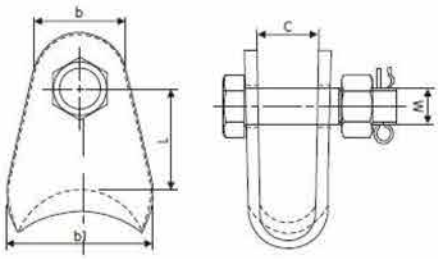


Thimble clevises are produced to combine a shackle or clevis with a preformed guy grip.
Thimble has a wire groove for dead ending strand and swings free for flexibility.

HE Code	Bolt Dia.	Tensile (KN)
HETC-07	M16	70
HETC-10	M18	100
HETC-12	M20	120

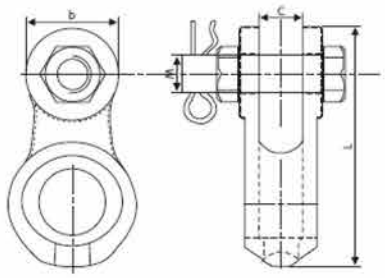
Material steel is hot dip galvanized to ASTM A153.

5.7.2 Thimble Clevis



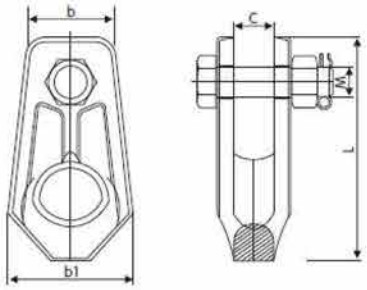
HE Code	Main dimensions(mm)					Specified failure load (kN)	Weight (kg)
	b	b1	L	C	M		
HETC-02	32	48.5	35	18	12	20	0.23

5.7.3 Thimble Clevis



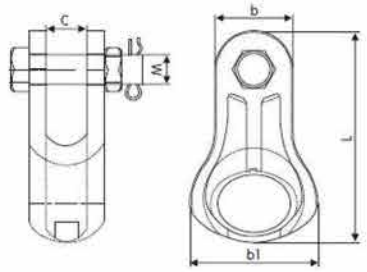
HE Code	Main dimensions(mm)				Specified failure load (kN)	Weight (kg)
	L	b	C	M		
HETC-50	104	40	18	14	50	0.41

5.7.4 Thimble Clevis (Parp)



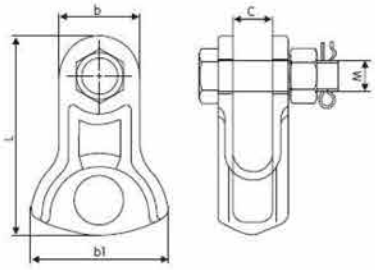
HE Code	Main dimensions(mm)					Specified failure load (kN)	Weight (kg)
	L	b	b1	C	M		
HETC-12P	135	50	76	23	18	120	1.29
HETC-16P	152	50	86	24	18	160	1.69

5.7.5 Thimble Clevis (Round)



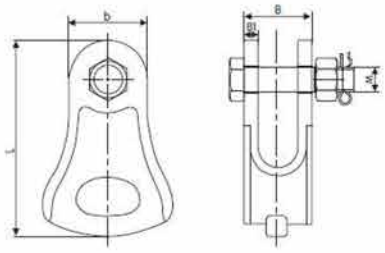
HE Code	Main dimensions(mm)					Specified failure load (kN)	Weight (kg)
	L	b	b1	C	M		
HETC-07A	113	42	66	22	16	70	0.8

5.7.6 Thimble Clevis-II



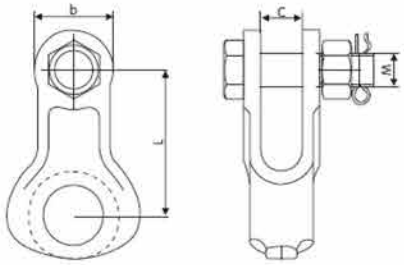
HE Code	Main dimensions(mm)					Specified failure load (kN)	Weight (kg)
	b	b1	L	C	M		
HETC-07D	38	65	96	20	13	70	0.56

5.7.7 Thimble Clevis-III



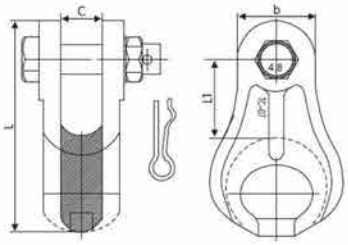
HE Code	Main dimensions(mm)					Specified failure load (kN)	Weight (kg)
	b	B	B1	L	M		
HETC-10S	50	44	9	126	16	100	0.9
HETC-12S	50	46	10	132	18	120	1.05
HETC-16S	54	48	11	136	20	160	1.15

5.7.8 Thimble Clevis



HE Code	Main dimensions(mm)				Specified failure load (kN)	Weight (kg)
	b	C	M	L		
HETC-50	104	40	18	14	50	0.41
HETC-04G	32	18	16	60	40	0.4
HETC-07G	38	20	16	70	70	0.6
HETC-10G	40	22	16 G6.8	72	100	0.8
HETC-12G	45	23	18 G6.8	80	120	1
HETC-16G	58	27	22 G6.8	96.5	160	1.6

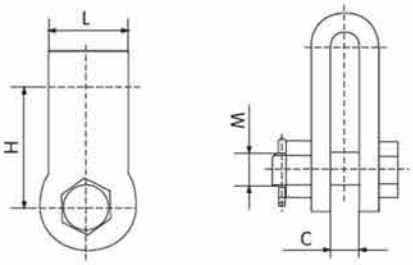
5.7.9 Thimble Clevis (Aluminum alloy)



HE Code	Main dimensions(mm)						Specified failure load (kN)	Weight (kg)
	L	L1	b	d	C	M		
HETC-07L	121	43	41	37	18	16	70	0.45

5.8 Clevis

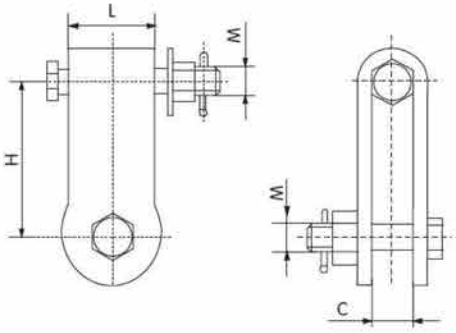
5.8.1 Clevise (Type UBC)



HE Code	Dimensions(mm)				Specified failure load(kN)	Weight (kg)
	C	M	H	L		
UBC-1	20	16	65	30	70	0.82
UBC-2	20	18	65	40	100	1.2
UBC-3	20	16	65	40	70	0.8

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

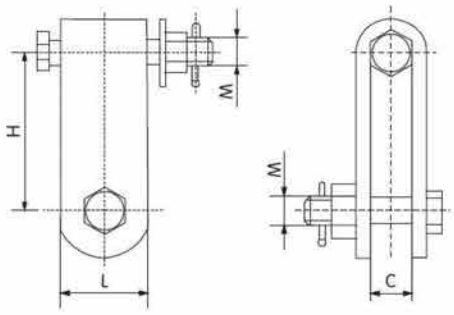
5.8.2 Clevise (Type UBC-T)



HE Code	Dimensions(mm)				Specified failure load(kN)	Weight (kg)
	C	M	H	L		
UBC-20T	30	27	120	60	200	3.9
UBC-25T	34	30	150	70	250	5.7
UBC-30T	38	36	150	70	300	7
UBC-40T	44	42	150	80	400	8.2
UBC-60T	50	48	180	70	600	15.55

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

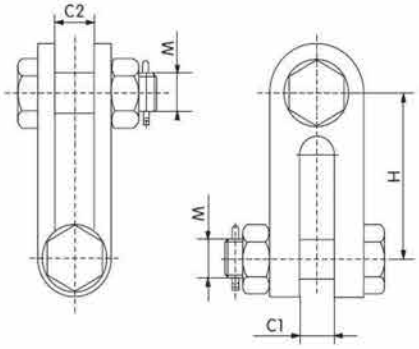
5.8.3 Clevise (Type UBC)



HE Code	Dimensions(mm)				Specified failure load(kN)	Weight (kg)
	C	M	H	L		
UBC-4	20	16	70	45	70	0.75
UBC-5	20	18	80	45	100	1.08
UBC-6	24	22	100	45	120	2.1
UBC-7	24	22	100	60	120	2.82
UBC-8	26	24	100	45	160	2.3
UBC-9	26	24	100	60	160	2.89
UBC-10	24	20	90	48	160	2.4
UBC-11	30	27	120	70	210	3.8

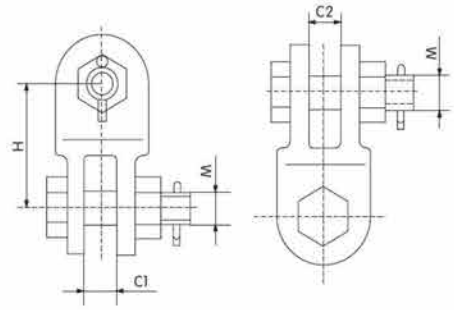
The cotter pin are stainless steel. the other parts are Hot-dip galvanized steel.

5.8.4 HZC/HZG type clevis



HE Code	Dimensions(mm)				Specified failure load(kN)	Weight (kg)
	c1	c2	M	H		
HZC-7	18	18	16	80	70	0.56
HZC-10	20	20	18	80	100	0.87
HZC-12	24	24	22	100	120	1.16
HZC-16	22	26	24	100	160	2.38
HZC-21A	24	26	24	100	210	3.4
HZC-21B	30	30	27	120	210	3.8
HZC-25A	28	30	27	110	250	3.8
HZC-25B	33	33	30	120	250	5
HZC-30	38	38	36	120	300	5.8
HZC-40	44	44	42	180	400	14
HZC-50	44	44	42	120	500	8.6
HZC-16G	24	26	24	90	160	2.84
HZC-21G	24	26	24	90	210	3.6
HZC-32G	32	32	30	100	320	4.8
HZC-42G	36	38	36	110	420	5.2
HZC-64G	40	44	42	130	640	6.4

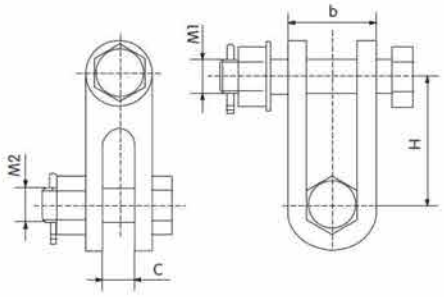
The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.



HE Code	Dimensions(mm)				Specified failure load(kN)	Weight (kg)
	c1	c2	M	H		
HZG-25	34	34	30	100	250	2.8
HZG-30	38	38	36	135	300	5.4
HZG-32	32	32	30	135	320	8
HZG-40	42	42	36	150	400	8.6
HZG-42	36	36	36	150	420	8.4
HZG-60	50	50	48	180	600	19.6

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.

5.8.5 Clevis

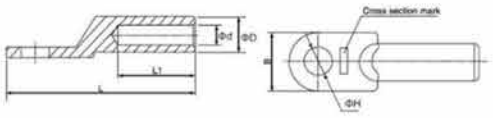


HE Code	Main dimensions(mm)					Specified failure load (kN)	Weight (kg)
	C	b	M1	M2	H		
HZBC-16	26	60	24	24	63	160	4.8
HZBC-20	26	60	24	24	100	200	5.08
HZBC-25	30	60	27	27	120	250	6.65
HZBC-32	38	60	36	36	136	320	7.4
HZBC-1632	26	60	36	24	140	160	6.8
HZBC-2132	30	60	36	27	140	210	7.2

HE Code	Main dimensions(mm)					Specified failure load (kN)	Weight (kg)
	C	b	M1	M2	H		
HZBC-0710	20	45	18	16	80	70	2.5
HZBC-1012	20	60	22	18	100	100	3.6
HZBC-1216	20	60	24	22	100	120	3.9
HZBC-1621	22	80	24	24	100	160	4
HZBC-2142	24	100	36	24	100	210	8
HZBC-2542	28	100	36	27	100	250	8.5
HZBC-3242	32	100	36	30	100	320	9.2

Connector

6.1 Aluminum alloy Cable Lugs

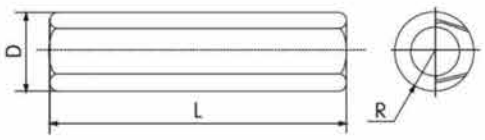


Compression cable lugs are produced to connect AAC, AAAC, ACSR and AACSR conductors at overhead lines.

HE Code	Dimensions(mm)					Wt./1000
	ΦH	ΦD	Φd	L	L1	kg
CCL-1	5.5	4.2	2.5±0.3	20	7	5
CCL-2	5.5	4.8	3.1±0.3	21	7	3
CCL-3	6.2	5.5	3.8±0.3	24	9	3
CCL-4	6.2	6.8	4.8±0.3	25	10	3
CCL-5	8.5	7.5	5.5±0.3	32	13	5
CCL-6	8.5	9	7±0.3	38	16	7
CCL-7	10.5	10.5	8.2±0.3	40	17	10
CCL-8	10.5	12.5	9.8±0.3	50	21	18
CCL-9	12.5	14.5	11.5±0.3	54	24	25
CCL-10	12.5	17.5	13.8±0.3	60	27	45
CCL-11	12.5	19.5	15.5±0.3	70	30	61
CCL-12	16.5	21	16.5±0.3	76	34	75
CCL-13	16.5	23.5	18.8±0.3	84	36	106
CCL-14	16.5	26.5	21±0.4	90	38	156
CCL-15	16.5	30	24±0.4	98	42	253
CCL-16	16.5	34	26.5±0.4	115	49	360
CCL-17	20.5	38	30±0.4	130	55	456
CCL-18	20.5	45	30±0.4	130	55	510

Material: aluminum, aluminum alloy
Finish: chemically burnt

6.2 Aluminum Repair Sleeve

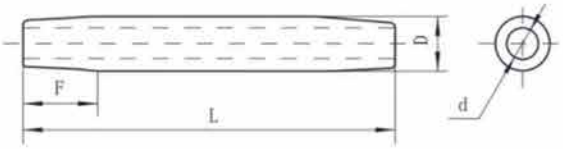


HEJX is designed to connect the Aluminum alloy or ACSR conductor in transmission network.

HE Code	Dimensions			Weight
	D	R	L	(kg)
HEJX-70-10	22	6.25	150	0.11
HEJX-70-40	24	8.1	150	0.1
HEJX-95	24	7.25	170	0.14
HEJX-95-55	32	9	170	0.26
HEJX-120	30	8.25	170	0.23
HEJX-150	30	9	170	0.21
HEJX-150-35	32	9.5	170	0.24
HEJX-185-10	32	10	170	0.23
HEJX-185	32	10.5	170	0.22
HEJX-210	34	11	220	0.32
HEJX-240	36	11.5	220	0.36
HEJX-240-55	36	12	220	0.34
HEJX-300-15	40	12.5	270	0.56
HEJX-300	40	13	270	0.53
HEJX-300-70	42	13.5	270	0.6
HEJX-400	45	14.5	320	0.81
HEJX-400-65	48	15	320	0.96
HEJX-400-95	48	15.5	320	0.92
HEJX-500	52	16	320	1.15
HEJX-560-40	60	17	340	1.77
HEJX-630	60	18	370	1.81
HEJX-800-55	65	20	370	2.06
HEJX-800	65	20.5	370	2.01

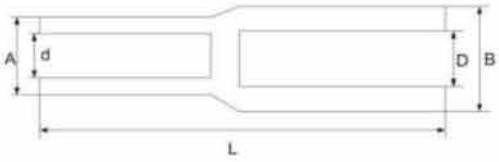
Raw material: Aluminum alloy

6.3 Aluminum sleeve connector



HE Code	Suitable Conductor	Main dimensions(mm)				Grip Strength (kN)	Weight (kg)
		L	D	d	F		
HEASC-150	LJ-150	280	30	17.0	20	22	0.36
HEASC-185	LJ-185	310	32	19.0	20	27	0.44
HEASC-210	LJ-210	330	34	20.0	20	31	0.60
HEASC-240	LJ-240	350	36	21.5	20	34	0.75
HEASC-300	LJ-300	390	40	24.0	25	45	0.95
HEASC-400	LJ-400	450	45	27.5	25	58	1.50
HEASC-500	LJ-500	510	52	30.5	30	73	2.00
HEASC-630	LJ-630	570	60	34.0	35	87	2.80
HEASC-800	LJ-800	650	65	38.5	40	110	4.80

6.4 Bimetal conductor tube connector

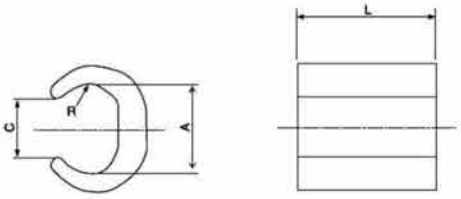


The HEGT series copper connecting pipes are made from T2 copper, with reliable quality. They are mainly used for the connection between various round power cables in power distribution devices. The specifications and models are complete, and the surface has pickling and tin plating treatments

HE Code	L	A	B	d	D
HEGT-16	70	9	10	5.7	6.5
HEGT-25	75	10	12	6.5	7.5
HEGT-35	84	11	14	7.5	8.5
HEGT-50	89.5	12	16	8.5	10.2
HEGT-70	98.5	14	18	10	11.5
HEGT-95	106	16	21	11.5	13.5
HEGT-120	109	18	23	13.5	15
HEGT-150	116	20	25	15	16.5
HEGT-185	125	22	27	16.5	18.5
HEGT-240	130	24	30	18.5	21
HEGT-300	144	27	34	21	23.5
HEGT-400	155	30	38	23.5	26.5

Raw material: aluminum and copper
Finish: tin plated

6.5 C Shape Copper Connectors



C-Shape clamps can be used in electrical lightning protection grounding projects that require firm connection and non-detachable connection, such as power grounding grids, lightning protection grounding grids, etc.

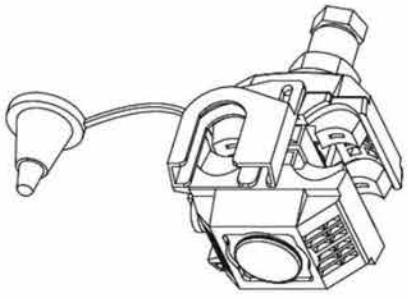
HE Code	Dimensions			
	A	L	C	T
HECT-10	6.3	12	4	1.6
HECT-16	7.8	13	5	2
HECT-20	8.6	13	5.5	2.9
HECT-26	10.2	16	6.5	3.2
HECT-44	13.4	20	8.5	4
HECT-60	15.4	22	9.7	4
HECT-76	17.3	22	10.8	5
HECT-98	20.8	25	12.8	5
HECT-122	22.1	26	13.5	5.5
HECT-154	25.7	28	17	6
HECT-190	28.5	35	17.5	6
HECT-240	30.2	40	19	7
HECT-288	34.7	45	22.5	7
HECT-365	37.5	50	24.8	7
HECT-450	42.5	60	28	10
HECT-560	46	65	31	11
HECT-700	58	70	44	12

Raw material: copper

6.6 Insulation Piercing Connectors

Insulation piercing clamps are made of plastic body and aluminum or copper blades.
Camps teeth pierce into insulation and made contact with the conductor strands.
Assembled with cable end caps, torque control nuts. Easy to install.

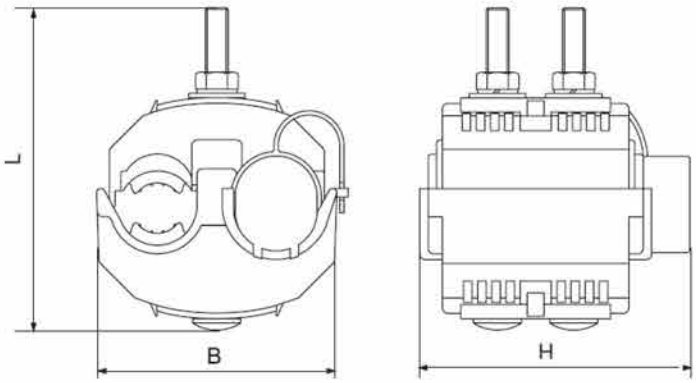
6.6.1 Insulation Piercing Connectors



HE Code	Voltage Kv	Bolt qty	Main wire mm^2	Branch wire mm^2	Wt. kg
IPC-1	1	1	10-70	1.5-10	0.48
IPC-2	1	1	16-95	4-35	0.15
IPC-3	1	1	50-150	6-35	0.15
IPC-4	1	1	16-120	16-120	0.2
IPC-5	1	2	35-120	35-120	0.37
IPC-6	1	2	50-240	50-240	0.8
IPC-7	10	2	15-185	15-185	0.8
IPC-8	10	2	50-150	50-150	0.5
IPC-9	10	2	16-70	16-70	0.8

Material: plastic body, aluminum/copper teeth

6.6.2 HEJBC series punctured cord grip



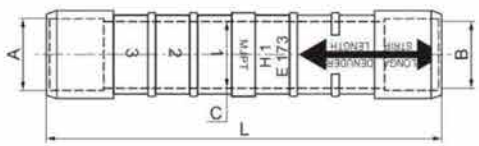
Structure feature:

- Puncture structure to insure the puncture pressure, and it's easy to fix.
- Pressurized structure, corrosion protection, and have a longevity of service
- Contact resistance is small, and the temperature of cord grip is low.
- It's connected with different pathway lead, and it's useful.
- Insulating property is wonderful.

Specification:

Application of voltage	Catalog No.	Main wire	Branch wire	Main dimensions(mm)			Bolt No.	Torque value
				L	B	H		
1kV	HEJBC1.5~25-1.5~10	1.5~25	1.5~10	45	27	60	1	13
	HEJBC16~70-4~15	16~70	4~25	52	52	85	1	25
	HEJBC16~70-16~70	16~70	16~70	52	52	85	1	25
	HEJBC16~120-16~20	16~120	16~120	52	52	85	1	25
	HEJBC16~95-4~35	16~95	4~35	60	45	85	1	25
	HEJBC25~95-25~95	25~95	25~95	65	56	85	2	25
	HEJBC50~120-16~50	50~120	16~50	56	54	85	1	25
	HEJBC50~150-50~120	50~120	50~120	60	54	85	1	25
	HEJBC50~150-6~35	50~150	6~35	60	45	85	1	25
	HEJBC50~150-50~150	50~150	50~150	67	58	95	2	25
	HEJBC95~240-95~240	95~240	95~240	77	67	95	2	25
	HEJBC120~240-25~120	120~240	25~120	67	63	95	2	25
	HEJBC120~240-70~120	120~240	70~120	78	60	95	2	25
	HEJBC120~240-120~240	120~240	120~240	80	64	95	2	25
10kV	HEJBC10-0	10~25	10~25	95	73	115	2	30
	HEJBC10-1	25~50	25~50	95	73	115	2	30
	HEJBC10-2	70~120	25~50	95	78	115	2	30
	HEJBC10-3	70~120	70~120	95	78	115	2	30
	HEJBC10-4	150~240	70~120	95	89	115	2	30
	HEJBC10-5	150~240	150~240	95	86	115	2	30
	HEJBC10-6	150~240	25~50	95	86	115	2	30

6.7 Pre-insulated cable Sleeve



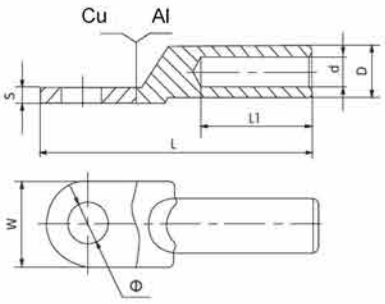
HEMJ sleeve is designed to connect the insulated cable (include ABC cable) in aerial distribution network.
It is in accordance with NFC33-021. The sleeve is with some tension.
And its cap can prevent the water into the barrel. It is colored differently to distinguish the cable sizes.

HE Code	Main	Branch	Diameter	Length
	A	B	C	L
HEMJ 16-16	16	16	20	98.5
HEMJ 25-25	25	25	20	98.5
HEMJ 35-35	35	35	20	98.5
HEMJ 50-50	50	50	20	98.5
HEMJ 70-70	70	70	20	98.5
HEMJ 95-95	95	95	20	98.5

Material: Aluminum alloy core with plastic case

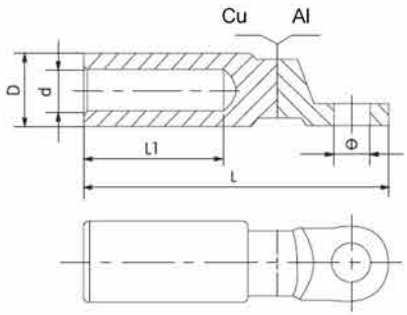
6.8 Copper-Aluminum connecting terminals

6.8.1 Copper-Aluminium connectiong terminals (friction welding)



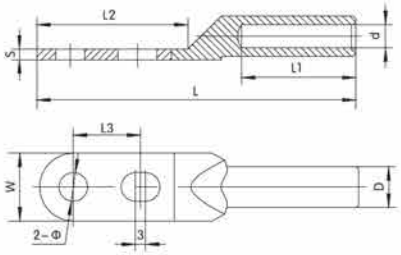
HE Code	Dimensions (mm)						
	Φ	D	d	L	L1	W	S
DCAM-10	8.4	10	5.0	65	32	16	2.7
DCAM-16	8.4	10	5.5	70	32	16	3.0
DCAM-25	8.4	12	7.0	75	34	18	3.5
DCAM-35	10.5	14	8.5	85	40	20	3.5
DCAM-50	10.5	16	9.5	90	42	23	4.0
DCAM-70	12.5	18	12.0	102	47	26	4.5
DCAM-95	12.5	21	13.0	112	50	28	5.0
DCAM-120	14.5	23	15.0	120	53	30	5.5
DCAM-150	14.5	25	16.0	126	55	34	6.0
DCAM-185	16.5	27	18.0	133	58	37	6.5
DCAM-240	16.5	30	20.0	140	60	40	7.5
DCAM-300	21.0	34	23.0	165	65	45	8.5
DCAM-400	21.0	38	26.0	170	70	52	9.5
DCAM-500	21.0	42	29.0	190	75	60	10.0
DCAM-630	Square head	54	34.0	225	80	78	10.5
DCAM-800	Square head	60	38.0	270	90	100	11.0

6.8.2 Bimetallic compression lug Cu-Al (Export type)



HE Code	Dimensions(mm)				
	Φ	D	d	L	L1
DCAC-16	8.5	16	5.5	90	42
DCAC-25	8.5	16	6.5	90	42
DCAC-35	8.5	16	8.5	90	42
DCAC-50	12.8	20	9.0	90	43
DCAC-70	12.8	20	11.0	90	43
DCAC-95	12.8	20	12.5	90	43
DCAC-120	12.8	25	13.7	118	60
DCAC-150	12.8	25	15.5	118	60
DCAC-185	12.8	32	17.0	120	60
DCAC-240	12.8	32	19.5	120	60
DCAC-300	12.8	34	22.5	130	62
DCAC-400	12.8	41	26.5	145	70
DCAC-500	Square	47	29.5	200	90
DCAC-630	Square	47	34.0	200	90

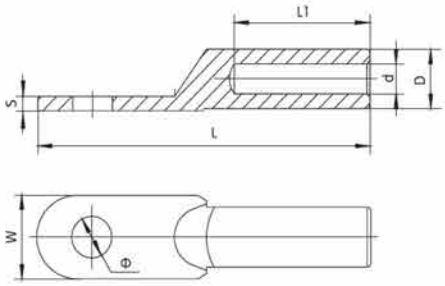
6.8.3 Cu-Al terminal(dual hole type)



HE Code	Dimensions(mml								
	Φ	D	d	L	L1	L2	L3	W	S
DCAS-16	8.4	10	5.5	90	32	45	20	18	3.0
DCAS-25	8.4	12	7	95	34	45	20	20	3.2
DCAS-35	0.4	14	8.5	107	40	50	20	23	3.6
DCAS-50	8.4	16	9.5	115	42	50	20	23	4.0
DCAS-70	10.5	18	12	128	47	62	25	28	4.5
DCAS-95	10.5	21	13	138	50	62	25	28	4.8
DCAS-120	12.5	23	15	152	53	72	30	34	5.5
DCAS-150	12.5	25	16	155	55	72	30	34	6.0
DCAS-185	12.5	27	18	168	58	80	35	40	6.7
DCAS-240	12.5	30	20	172	60	80	35	40	7.0
DCAS-300	16.5	34	23	195	65	90	40	50	8.5
DCAS-400	16.5	38	26	200	70	90	40	50	8.5
DCAS-500	17.0	42	29.5	235	75	120	45	60	10.0

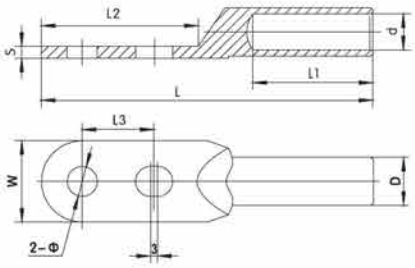
6.9 Cu-Al connecting terminals

6.9.1 Copper connecting terminals (oil plugging)



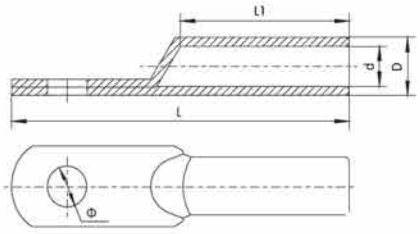
HE Code	Dimensions(mm)						
	Φ	D	d	L	L1	W	S
DCD-10	8.4	9	5.5	66	30	16	2.2
DCD-16	8.4	10	6	67	31	16	2.5
DCD-25	8.4	11	7	70	34	18	3.0
DCD-35	10.5	12	8.5	79	36	20	3.0
DCD-50	10.5	14	9.6	87	40	23	3.5
DCD-70	12.5	16	12	95	44	26	4.0
DCD-95	12.5	18	13	105	47	28	4.5
DCD-120	14.5	20	15	112	50	30	5.0
DCD-150	14.5	22	16	118	54	34	5.5
DCD-185	16.5	25	18	125	56	38	6.0
DCD-240	16.5	27	20	136	60	42	7.0
DCD-300	21.0	30	23	160	65	48	8.0
DCD-400	21.0	34	26	165	70	54	9.0
DCD-500	Square	38	29	190	75	64	9.5
DCD-630	Square	45	34	220	85	78	10.0
DCD-800	Square	50	38	260	85	100	10.5

6.9.2 Copper connecting terminals (dual hole type)



HE Code	Dimensions(mm)								
	Φ	D	d	L	L1	L2	L3	W	S
DCS-10	8.4	9	5.5	87	30	41	20	16	3.0
DCS-16	8.4	10	6	93	31	47	20	18	3.0
DCS-25	8.4	11	7	93	34	47	20	20	3.0
DCS-35	8.4	12	8.5	102	36	50	20	23	3.0
DCS-50	8.4	14	9.6	107	40	52	20	23	3.0
DCS-70	10.5	16	12	118	44	58	25	28	4.0
DCS-95	10.5	18	13	126	47	60	25	28	4.0
DCS-120	12.5	20	15	138	50	65	30	34	4.0
DCS-150	12.5	22	16	142	54	67	30	34	5.0
DCS-185	12.5	25	18	160	56	77	35	40	6.0
DCS-240	12.5	27	20	165	58	77	35	40	6.5
DCS-300	16.5	30	23	178	62	80	40	50	8.5
DCS-400	16.5	34	26	188	70	83	40	50	8.5

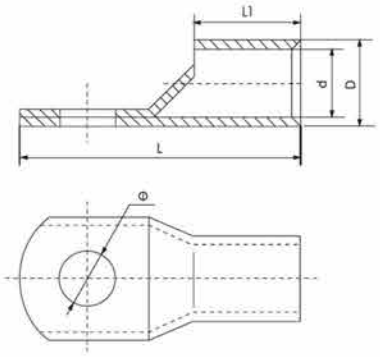
6.9.3 Copper connecting terminals (tubing)



HE Code	Dimensions(mm)				
	Φ	D	d	L	L1
DCG-10	6.5	8	5	50	30
DCG-16	6.5	9	6	55	31
DCG-25	6.5	10	7	60	34
DCG-35	6.5	11	8	66	36
DCG-50	8.5	13	10	72	40
DCG-70	8.5	16	12	80	42
DCG-95	10.5	18	14	87	46
DCG-120	12.5	20	15	96	48
DCG-150	12.5	22	16	103	52
DCG-185	16.5	25	18	115	55
DCG-240	16.5	27	20	120	60
DCG-300	17.0	31	24	135	65
DCG-400	17.0	34	26	150	70
DCG-500	21.0	38	30	170	75
DCG-630	Square	45	35	210	85
DCG-800	Square	50	40	270	167

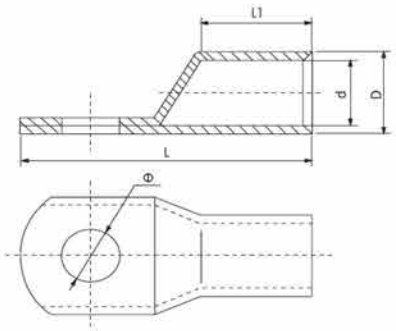
6.10 Copper pipe-pressed terminal

6.10.1 Spy hole copper connecting terminals



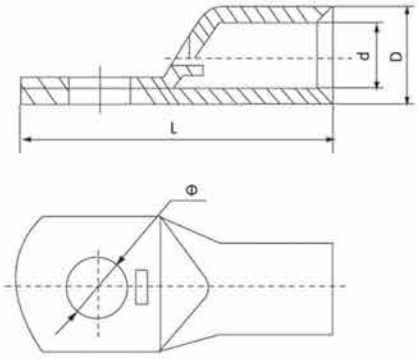
HE Code	Dimensions(mm)				
	Φ	D	d	L	L1
DKC-4	6.2	4.8	3.1	21.0	6.4
DKC-6	6.2	5.5	3.8	24.0	9.0
DKC-10	6.2	6.8	1.8	25.5	10.0
DKC-16	8.2	7.5	6.5	30.5	12.0
DKC-25	8.2	9.0	7.0	34.0	14.0
DKC-35	10.5	10.5	8.2	38.0	14.0
DKC-50	10.5	12.5	9.8	45.0	18.0
DKC-70	12.5	14.5	11.5	50.0	18.6
DKC-95	12.5	17.5	13.8	55.5	23.5
DKC-120	12.5	19.5	15.5	63.0	24.0
DKC-150	16.5	20.5	16.5	71.0	26.0
DKC-185	16.5	23.5	18.8	78.0	33.0
DKC-240	16.5	26.5	21.0	92.0	37.0
DKC-300	16.5	30.0	24.0	102.0	39.5
DKC-400	16.5	34.0	26.5	113.0	46.0
DKC-500	20.5	38.0	30.0	123.0	50.0
DKC-630	20.5	45.0	35.0	135.0	58.0
DKC-800	22.5	50.0	39.0	170.0	73.0
DKC-l000	22.5	56.0	44.0	200.0	89.0

6.10.2 Copper connecting terminals



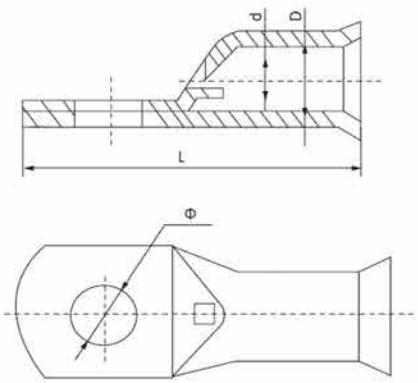
HE Code	Dimensions(mm)				
		D	d	L	L1
HDC-4	6.2	4.8	3.1	21.0	6.4
HDC-6	6.2	5.5	3.8	24.0	9.0
HDC-10	6.2	6.8	1.8	25.5	10.0
HDC-16	8.2	7.5	6.5	30.5	12.0
HDC-25	8.2	9.0	7.0	34.0	14.0
HDC-35	10.5	10.5	8.2	38.0	14.0
HDC-50	10.5	12.5	9.8	45.0	18.0
HDC-70	12.5	14.5	11.5	50.0	18.6
HDC-95	12.5	17.5	13.8	55.5	23.5
HDC-120	12.5	19.5	15.5	63.0	24.0
HDC-150	16.5	20.5	16.5	71.0	26.0
HDC-185	16.5	23.5	18.8	78.0	33.0
HDC-240	16.5	26.5	21.0	92.0	37.0
HDC-300	16.5	30.0	24.0	102.0	39.5
HDC-400	16.5	34.0	26.5	113.0	46.0
HDC-500	20.5	38.0	30.0	123.0	50.0
HDC-630	20.5	45.0	35.0	135.0	58.0

6.10.3 Copper spy hole connecting terminals



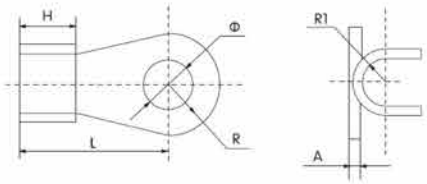
HE Code	Dimensions(mm)			
	Φ	D	d	L
HDKS-1.5	4.2，5.2	3.5	1.8	21.0
HDKS-2.5	4.2，5.2，6.2	4.0	2.5	21.0
HDKS-4	5.2，6.2	4.8	3.1	21.0
HDKS-6	5.2，6.2，8.2	5.5	3.8	24.0
HDKS-10	6.2，8.2	6.8	4.8	25.5
HDKS-16	6.2，8.2，10.5	7.5	5.5	30.5
HDKS-25	6.2，8.2，10.5	9.0	7.0	34.0
HDKS-35	6.2，8.2，10.5，12.5	10.5	8.2	38.0
HDKS-50	8.2，10.5，12.5	12.5	9.8	45.0
HDKS-70	8.2，10.5，12.5	14.5	11.5	50.0
HDKS-95	10.5，12.5	17.5	13.8	55.5
HDKS-120	12.5，16.5	19.5	15.5	63.0
HDKS-150	12.5，16.5	20.5	16.5	71.0
HDKS-185	16.5	23.5	18.8	78.0
HDKS-240	16.5	26.5	21.0	92.0
HDKS-300	16.5，20.5	30.0	24.0	102.0
HDKS-400	16.5，20.5	34.0	26.5	113.0
HDKS-500	16.5，20.5	38.0	30.0	123.0
HDKS-630	20.5	45.0	35.0	135.0
HDKS-800	22.5	50.0	39.0	170.0
HDKS-1000	22.5	56.0	44.0	200.0

6.10.4 Bell mouth Copper connecting terminals



HE Code	Dimensions(mm)			
	Φ	D	d	L
HDCL-1.5	4.2，5.2	3.5	1.8	21.0
HDCL-2.5	4.2，5.2，6.2	4.0	2.5	21.0
HDCL-4	5.2，6.2	4.8	3.1	21.0
HDCL-6	5.2，6.2，8.2	5.5	3.8	24.0
HDCL-10	6.2，8.2	6.8	1.8	25.5
HDCL-16	6.2，8.2，10.5	7.5	6.5	30.5
HDCL-25	6.2，8.2，10.5	9.0	7.0	34.0
HDCL-35	6.2，8.2，10.5，12.5	10.5	8.2	38.0
HDCL-50	8.2，10.5，12.5	12.5	9.8	45.0
HDCL-70	8.2，10.5，12.5	14.5	11.5	50.0
HDCL-95	10.5，12.5	17.5	13.8	55.5
HDCL-120	12.5，16.5	19.5	15.5	63.0
HDCL-150	12.5，16.5	20.5	16.5	71.0
HDCL-185	16.5	23.5	18.8	78.0
HDCL-240	16.5	26.5	21.0	92.0
HDCL-300	16.5，20.5	30.0	24.0	102.0
HDCL-400	16.5，20.5	34.0	26.5	113.0
HDCL-500	16.5，20.5	38.0	30.0	123.0
HDCL-630	20.5	45.0	35.0	135.0
HDCL-800	22.5	50.0	39.0	170.0
HDCL-1000	22.5	56.0	44.0	200.0

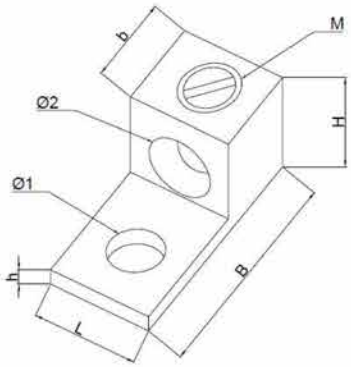
6.11 DCOT copper passing through terminal



HE Code	Dimensions(mm)					
	Φ	H	L	R	R1	A
DCOT-10	5.2	6	14.5	4.5	2	0.8
DCOT-20	6.2	7.0	17.0	5.5	2.5	1.0
DCOT-30	6.2	8.2	19.0	5.8	3.2	1.2
DCOT-40	6.2	9.0	19.5	6.2	3.5	12.0
DCOT-50	6.2	9.0	23.0	6.5	3.5	1.2
DCOT-60	8.2	10.0	24.0	7.0	4.0	1.4
DCOT-80	8.2	11.0	25.0	8.0	4.5	1.5
DCOT-100	8.2	12.0	29.0	8.5	5.0	1.5
DCOT-150	10.2	12.0	31.0	9.0	5.5	1.6
DCOT-200	10.2	14.0	33.0	10.0	6.0	1.7
DCOT-250	10.2	15.5	36.0	10.5	6.5	2.0
DCOT-300	12.2	16.0	40.0	11.5	7.0	2.0
DCOT-400	14.2	18.0	43.0	13.0	8.0	2.2
DCOT-500	14.2	20.0	46.0	14.5	8.5	2.4
DCOT-600	16.2	22.0	50.5	16.0	10.5	2.8
DCOT-800	18.2	26.0	61.0	17.5	12.5	3.2
DCOT-1000	18.2	33.0	66.0	20.5	15.5	3.5

6.12 Mechanical Lug

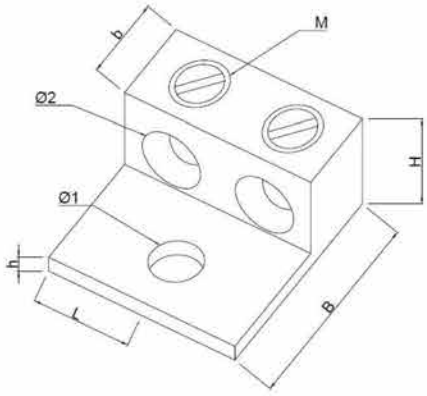
6.12.1 Single Conductor, One-Hole Mount



Material
For copper and aluminum conductors
Easy installation- no special tools required
Tin-plated for low contact resistance
All aluminum bodies
OEM & Customized are available.

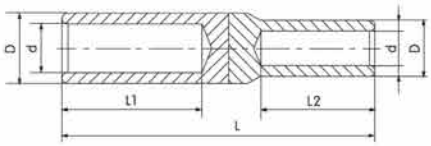
Type	B	b	H	h	L	φ2	M	φ1
HEML-804	27.1	9.5	12.5	2.2	9.5	6.5	1/4-28	6.5
HEML--805	27.1	9.5	12.5	2.2	12.8	6.5	1/4-28	6.5
HEML--806	29.5	12	14.3	2.5	13	8	5/16-24	6.5
HEML--807	37.2	16	20.6	4.5	15.8	10	5/16-24	6.5
HEML--808	37.2	16	20.6	4.5	15.8	12.5	7/16-20	6.5
HEML--809	54	25.5	29.2	6.2	25.2	15.2	5/8-18	8.3
HEML--817	57.2	28.8	31.8	6.5	28.5	19	11/16-16	10.3
HEML--1818	70	35	38	11.2	35	24	7/8-14	10.3
HEML--1810	50.8	23.5	27	6.5	23.8	16.7	5/8-18	8.2
HEML--818	70	31.2	38	8	35	22	7/8-14	10.3
HEML--819	86.5	42	49.7	13	44	27.2	15/16-16	16.5

6.12.2 Two Conductors, One-Hole Mount



Type	B	b	H	h	L	L1	φ2	M	φ1
HEML-2804	27	10	12.8	2	19	10	7	2-1/4-28	7
HEML-2807	38	12.5	20.5	3.3	30	14.5	10	2-5/16-24	6.5
HEML-2808	38	12.5	20.5	3.3	30	14.5	11	2-1/4-30	6.5
HEML-2809	65.8	25.6	30	6.2	42	20.8	15.2	2-1/4-31	6.5
HEML-2817	73.2	28.7	31.7	6.4	49	24	19	2-1/4-32	14.2
HEML-2818	79.4	35	39.7	11	60	29	24	2-1/4-33	14.2
HEML-2819	85.53	41	49.2	12.5	81	27.2	27.2	2-1/4-34	16.5
HEML-2820	85.5	41	49.2	12.5	81	40.5	32	2-1/4-35	16.5

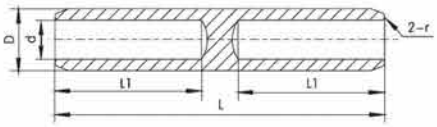
6.13 Copper-Aluminum connecting tubes



HE Code	Dimensions(mm)						
	D1	d1	D	d	L1	L2	L
LCA-10	9	4.2	9	4.5	28	28	70
LCA-16	9	5	9	5.5	31	28	75
LCA-25	10	5.5	12	7	32	30	80
LCA-35	11	7	14	8.5	37	32	90
LCA-50	13	8.5	16	9.5	42	34	95
LCA-70	15	9.6	18	12	46	35	100
LCA-95	17	12	21	13	50	41	110
LCA-120	19	13	23	15	52	43	112
LCA-150	21	15	25	16	55	46	118
LCA-185	23	16	27	18	57	48	125
LCA-240	25	18	30	21	61	50	130
LCA-300	29	20	34	23	65	55	140
LCA-400	30	23	38	26	70	60	150
LCA-500	34	26	42	29	75	64	160
LCA-630	38	29	54	34	80	70	170

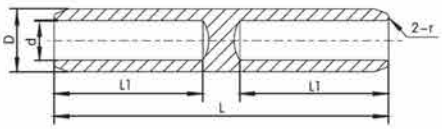
6.14 Copper-Aluminum connecting tubes(oil plugging)

6.14.1 Aluminium connecting tubes(oil plugging)



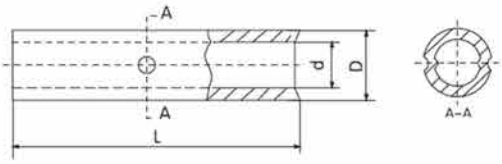
HE Code	Dimensions(mm)				
	D	d	L	L1	r
LDA-10	9	4.5	65	28	0.8
LDA-16	10	5.5	70	31	0.8
LDA-25	12	7.0	75	32	1.0
LDA-35	14	8.5	85	37	1.0
LDA-50	16	9.5	95	42	1.2
LDA-70	18	12.0	105	46	1.2
LDA-95	21	13.0	110	50	1.5
LDA-120	23	15.0	115	52	1.5
LDA-150	25	16.0	120	55	1.8
LDA-185	27	18.0	125	57	1.8
LDA-240	30	20.0	130	61	1.8
LDA-300	34	23.0	140	65	1.8
LDA-400	38	26.0	150	70	2.0
LDA-500	42	29.0	160	75	2.2
LDA-630	54	34.0	170	80	4.0

6.14.2 Copper connecting tubes(oil plugging)



HE Code	Dimensions(mm)				
	D	d	L	L1	r
LDC-10	9	5.0	62	28	0.7
LDC-16	10	6.0	65	30	0.7
LDC-25	11	7.0	70	32	0.7
LDC-35	12	8.5	75	34	0.7
LDC-50	14	9.6	80	35	1.0
LDC-70	16	12.0	90	41	1.0
LDC-95	18	13.0	95	43	1.0
LDC-120	20	15.0	100	46	1.0
LDC-150	22	16.0	105	48	1.2
LDC-185	25	18.0	110	50	1.2
LDC-240	27	20.0	120	55	1.5
LDC-300	30	23.0	130	60	1.5
LDC-400	34	26.0	140	64	1.8
LDC-500	38	29.0	155	70	1.8
LDC-630	45	34.0	170	80	2.0

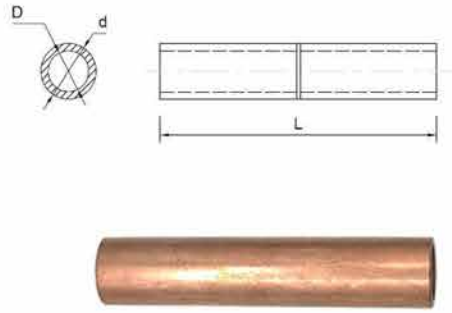
6.15 LCC copper connecting tube



HE Code	Dimensions(mm)		
	D	d	L
LCC-1.5	3.7	1.8	20
LCC-2.5	4	2.5	20
LCC-4	4.8	3.1	20
LCC-6	5.5	3.8	25
LCC-10	6.8	4.8	30
LCC-16	7.5	5.5	35
LCC-25	9	7	40
LCC-35	10.5	8.2	45
LCC-50	12.5	9.8	50
LCC-70	14.5	11.5	55
LCC-95	17.5	13.5	60
LCC-120	19.5	15	65
LCC-150	21	16.5	70
LCC-185	23.5	18.5	75
LCC-240	26.5	21	80
LCC-300	30	24	85
LCC-400	34	27	90
LCC-500	38	30	100
LCC-630	45	35	110
LCC-800	50	39	150
LCC-1000	56	44	170

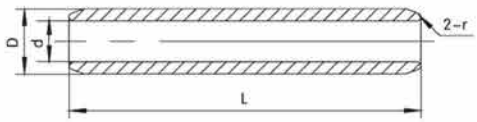
6.16 passing through Cu-Al connecting tubes

6.16.1 Copper connecting tubes (passing through)



HE Code	Model	Length (L)	Inner hole (d)	Outside diameter(D)
HECTB-1	10mm2	51mm	6.7mm	8mm
HECTB-2	16mm2	56mm	7mm	9mm
HECTB-3	25mm2	60mm	7.8mm	10mm
HECTB-4	35mm2	68mm	8.8mm	10.5mm
HECTB-5	50mm2	71mm	10mm	12.5mm
HECTB-6	70mm2	77.5mm	13.1mm	16mm
HECTB-7	95mm2	87mm	14.8mm	18mm
HECTB-8	120mm2	91mm	15.4mm	19mm
HECTB-9	150mm2	96mm	17.8mm	22mm
HECTB-10	185mm2	100mm	19.3mm	24mm
HECTB-11	240mm2	109mm	21.1mm	26mm
HECTB-12	300mm2	121mm	24.2mm	30mm
HECTB-13	400mm2	138mm	25.8mm	32mm
HECTB-14	500mm2	150mm	30mm	38mm
HECTB-15	630mm2	170mm	34.8mm	45mm

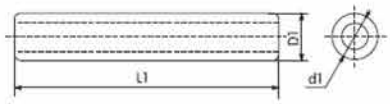
6.16.2 Copper connecting tubes (passing through)



HE Code	Dimensions(mm)			
	D	d	L	r
LTAP-16	10	5.5	65	0.8
LTAP-25	12	7.0	70	1.0
LTAP-35	14	1.5	75	1.0
LTAP-50	16	9.5	80	1.2
LTAP-70	18	12.0	90	1.2
LTAP-95	21	13.0	95	1.5
LTAP-120	23	15.0	100	1.5
LTAP-150	25	16.0	105	1.8
LTAP-185	21	18.0	110	1.8
LTAP-240	30	20.0	120	1.8
LTAP-300	34	23.0	110	1.8
LTAP-400	38	26.0	140	2.0
LTAP-500	42	29.0	150	2.2
LTAP-630	54	34.0	170	4.0
LTAP-800	60	38.0	200	4.0

6.17 Splicing sleeves

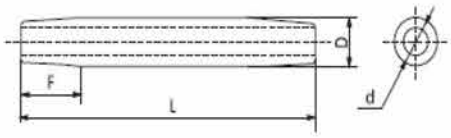
6.17.1 Splicing sleeves for steel wire(hydraulic compression and explosive overlap joint)



HE Code	Suitable Steel wire	Dimensions(mm)			Grip Strength (KN)	Weight (kg)
		L1	D1	d1		
SGYB-25	GJ-25	190	14	7.2	33	0.17
SGYB-35	GJ-35	220	16	8.4	45	0.3
SGYB-50	GJ-50	240	18	9.6	60	0.4
SGYB-55	GJ-55	240	22	10.3	65	0.56
SGYB-70	GJ-70	290	22	11.7	88	0.65
SGYB-80	GJ-80	300	24	12	100	0.8
SGYB-100	GJ-100	340	26	13.7	123	1
SGYD-35	GJ-35	110	22	16	45	0.15
SGYD-50	GJ-50	130	25	17	60	1.27
SGYD-55	GJ-55	130	26	18	70	0.28
SGYD-70	GJ-70	150	28	20	88	0.35
SGYD-100	GJ-100	170	32	23	123	0.52

Hot-dip galvanized steel.

6.17.2 Splicing sleeves for aluminum conductor



HE Code	Suitable Steel wire	Dimensions(mm)				Grip Strength (KN)	Weight (kg)
		L	D	d	F		
SSAC-150	LJ-150	280	30	17	20	22	0.36
SSAC-185	LJ-185	310	32	19	20	27	0.44
SSAC-210	LJ-210	330	34	20	20	31	0.6
SSAC-240	LJ-240	350	36	21.5	20	34	0.75
SSAC-300	LJ-300	390	40	24	25	45	0.95
SSAC-400	LJ-400	450	45	27.5	25	58	1.5
SSAC-500	LJ-500	510	52	30.5	30	73	2
SSAC-630	LJ-630	570	60	34	35	87	2.8
SSAC-800	LJ-800	650	65	38.5	40	110	4.8

Material is aluminum.

6.17.3 Splicing sleeves for ACSR/AS(Hydraulic compression type)

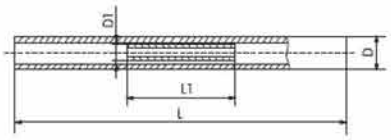


图1

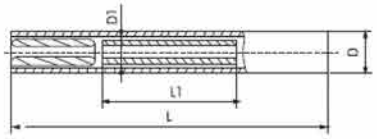


图2

HE Code	Suitable Steel wire	Fig No.	Dimensions(mm)				Grip Strength (KN)	Weight (kg)
			L	D	L1	D1		
SLG-80-47	ACSR/AS-80/47	2	480	36	250	18	64.6	1.3
SLG-95-55	ACSR/AS-95/55	2	500	36	260	20	74	1.32
SLG-240-40	ACSR/AS-240/40	1	500	38	110	22	81.6	1.18
SLGD-300-25	ACSR/AS-300/25	1	500	42	90	20	74.4	1.35
SLGD-300-40	ACSR/AS-300/40	1	530	42	110	22	90	1.42
SLGD-300-50	ACSR/AS-300/50	1	550	42	130	24	101	1.5
SLGD-400-35	ACSR/AS-400/35	1	560	48	100	22	99	2.03
SLGD-400-50	ACSR/AS-400/50	1	590	48	130	24	117	2.07

The inner sleeve is hot-dip galvanized, the outer sleeve and lining sleeves are aluminum.

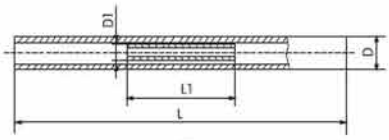


图1

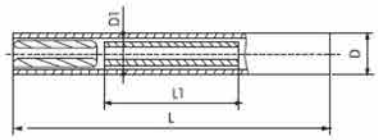
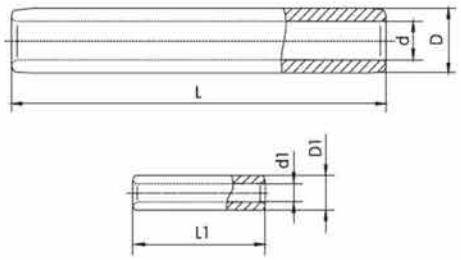


图2

HE Code	Suitable Steel wire	Fig No.	Dimensions(mm)				Grip Strength (KN)	Weight (kg)
			L	D	L1	D1		
SLY-95-20	JL/G1A-95/20	1	380	26	120	12	35.4	0.5
SLY-150-25	JL/G1A-150/25	1	400	32	120	14	51	0.7
SLY-185-30	JL/G1A-185/30	1	420	34	120	18	61.4	0.7
SLYD-240-30	JL/G1A-240/30	1	460	36	100	20	71.5	0.9
SLYD-240-40	JL/G1A-240/40	1	480	36	100	20	79.6	1
SLYD-300-25	JL/G1A-300/25	1	480	40	90	20	79.6	1
SLYD-300-40	JL/G1A-300/40	1	490	40	100	20	87.7	1.3
SLYD-400-35	JL/G1A-400/35	1	540	45	100	22	98.5	1.8
SLYD-400-50	JL/G1A-400/50	1	570	45	120	24	116.9	2.1
SLYD-500-45	JL/G1A-500/45	1	610	52	110	24	121	2.9
SLYD-630-45	JL/G1A-630/45	1	680	60	110	24	154.1	4.3
SLYD-630-55	JL/G1A-630/55	1	690	60	120	26	156.1	4.7

The inner sleeve is hot-dip galvanized, the outer sleeve and lining sleeves are aluminum.

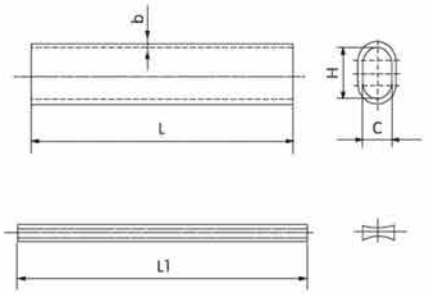
6.17.4 Splicing sleeves for ACSR conductor(Hydraulic overlap joint)



HE Code	Suitable Conductor	Dimensions(mm)						Grip Strength (kN)
		L	D	d	L1	D1	d1	
SPGL-50-8	LGJ-50/8	280	30	18	80	14	7	16.l
SPGL-50-30	LGJ-50/30	300	34	22	100	20	11.6	40.5
SPGL-70-10	LGJ-70/10	300	30	18	80	16	8.3	22.3
SPGL-70-40	LGJ-70/40	330	34	22	110	20	13.6	55.4
SPGL-95-15	LGJ-95/15	320	32	21	80	18	8.4	33.3
SPGL-95-20	LGJ-95/20	340	32	21	80	18	9.3	35.4
SPGL-95-55	LGJ-95/55	420	36	24	120	22	16	74.2
SPGL-120-7	LGJ-120/7	320	30	16	80	14	6.5	26.2
SPGL-120-20	LGJ-120/20	380	30	17	80	16	9.3	39
SPGL-120-25	LGJ-120/25	380	30	17	100	16	10.5	45.5
SPGL-120-70	LGJ-120/70	450	40	26	130	24	18	93.5
SPGL-150-8	LGJ-150/8	360	30	17.5	80	14	7	31.3
SPGL-150-20	LGJ-150/20	400	30	18	80	16	9.3	44.3
SPGL-150-25	LGJ-150/25	400	30	19	90	18	10.5	51.4
SPGL-150-35	LGJ-150/35	440	30	19	120	18	12.5	61.8
SPGL-185-10	LGJ-185/10	380	32	19.5	80	16	7.8	38.9
SPGL-185-25	LGJ-185/25	410	32	20.5	90	18	10.5	56.5
SPGL-185-30	LGJ-185/30	420	32	20.5	100	18	11.6	61.1
SPGL-185-45	LGJ-185/45	480	32	21	120	20	14	76.2
SPGL-210-10	LGJ-210/10	400	34	20.5	80	16	8.3	42.9
SPGL-210-25	LGJ-210/25	420	34	21.5	90	20	11.2	62.7
SPGL-210-35	LGJ-210/35	450	34	22	100	20	12.5	70.6
SPGL-210-50	LGJ-210/50	480	34	23.5	120	22	15	86.3
SPGL-240-30	LGJ-240/30	450	36	23	100	20	12	71.9
SPGL-240-40	LGJ-240/40	470	36	23	100	20	13.3	79.2
SPGL-240-55	LGJ-240/55	490	36	24	120	22	16	97
SPGL-300-15	LGJ-300/15	440	40	24.5	70	18	8.4	64.7
SPGL-300-20	LGJ-300/20	450	40	25	80	18	9.8	71.9
SPGL-300-25	LGJ-300/25	480	40	25.5	90	20	11.2	79.3
SPGL-300-40	LGJ-300/40	490	40	25.5	100	20	13.3	87.6
SPGL-300-50	LGJ-300/50	510	40	26	120	22	15	98.3
SPGL-300-70	LGJ-300/70	560	42	27	130	24	18	121.6
SPGL-400-20	LGJ-400/20	510	45	28.5	80	18	9.8	84.4
SPGL-400-25	LGJ-400/25	520	45	28.5	90	20	11.2	91.2
SPGL-400-35	LGJ-400/35	540	45	28.5	100	22	12.5	98.7
SPGL-400-50	LGJ-400/50	570	45	29.5	120	24	15.4	117.3
SPGL-400-65	LGJ-400/65	580	48	29.5	130	26	17.2	128.5
SPGL-500-35	LGJ-500/35	580	52	31.5	100	22	12.5	113.6
SPGL-500-45	LGJ-500/45	610	52	31.5	110	24	14	121.7
SPGL-500-65	LGJ-500/65	640	52	32.5	130	26	17.2	146.3
SPGL-630-45	LGJ-630/45	650	60	35.5	110	24	14	141.3
SPGL-630-55	LGJ-630/55	680	60	36	120	26	16	156.2
SPGL-800-55	LGJ-800/55	730	65	40	120	26	16	182
SPGL-800-70	LGJ-800/70	760	65	40.5	130	26	18	196.7

The inner sleeve is hot-dip galvanized, the outer sleeve and lining sleeves are aluminum.

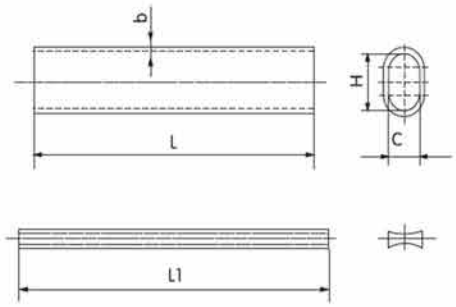
6.17.5 Splicing sleeves for ACSR conductor (Explosive overlap joint)



1,Splicing sleeves for ACSR conductor (Explosive overlap joint)

HE Code	Suitable Conductor	Dimensions(mm)					Grip Strength (kN)	Weight (kg)
		b	H	C	L	L1		
JXAC-35-6	LGJ-35/6	2.1	18.6	8.8	170	180	12	0.08
JXAC-50-8	LGJ-50/8	2.3	22	10.5	210	220	16	0.13
JXAC-70-10	LGJ-70/10	2.6	26	12.5	250	260	22	0.19
JXAC-95-15	LGJ-95/15	2.6	31	15	260	270	33	0.22
JXAC-95-20	LGJ-95/20	2.6	31.5	15.2	260	270	35	0.22
JXAC-120-7	LGJ-120/7	3.1	33	16	300	310	26	0.34
JXAC-120-20	LGJ-120/20	3.1	35	17	300	310	39	0.34
JXAC-150-8	LGJ-150/8	3.1	36	17.5	310	320	31	0.4
JXAC-150-20	LGJ-150/20	3.1	37	18	310	320	44	0.4
JXAC-150-25	LGJ-150/25	3.1	39	19	310	320	51	0.4
JXAC-185-10	LGJ-185/10	3.4	40	19.5	350	360	39	0.5
JXAC-185-25	LGJ-185/25	3.4	43	21	350	360	56	0.5
JXAC-185-30	LGJ-185/30	3.4	43	21	350	360	61	0.5
JXAC-210-10	LGJ-210/10	3.6	43	21	360	370	43	0.57
JXAC-210-25	LGJ-210/25	3.6	44	21	360	370	63	0.63
JXAC-210-35	LGJ-210/35	3.6	45	22	400	410	71	0.67
JXAC-240-30	LGJ-240/30	3.9	48	23.5	370	380	72	0.7
JXAC-240-40	LGJ-240/40	3.9	48	23.5	460	470	79	0.7

Material is aluminum.

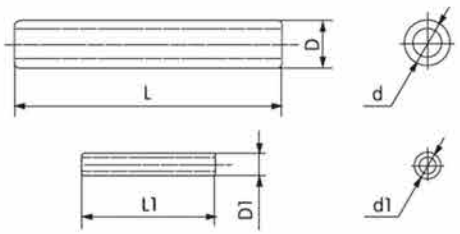


2, Splicing sleeves for jumper conductor

HE Code	Suitable Conductor	Dimensions(mm)					Grip Strength (kN)	Weight (kg)
		b	H	C	L	L1		
JXTX-70-40	LGJ-70/40	2.6	14.7	30.4	250	260	55.4	0.21
JXTX-95-55	LGJ-95/55	3.1	17.5	36.5	250	260	74.2	0.25
JXTX-210-50	LGJ-210/50	5	22.6	47	370	380	86.3	0.72
JXTX-300-25	LGJ-300/25	5	26	54	290	300	79.3	0.66
JXTX-400-35	LGJ-400/35	5	39	60	330	340	98.7	0.8
JXTX-400-95	LGJ-400/95	5.5	31	64	330	340	162.8	1

Material is aluminum.

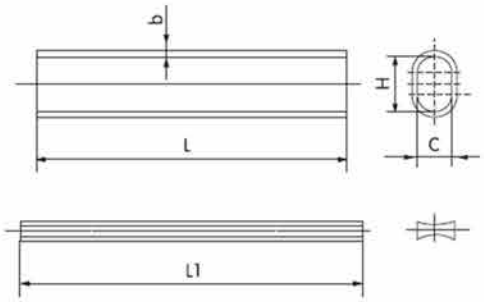
6.17.6 Splicing sleeves for ACSR conductor (Explosive overlap joint)



HE Code	Suitable Conductor	Dimensions(mm)						Grip Strength (kN)	Weight (kg)
		L	D	d	L1	D1	d1		
JXGY-70-40	LGJ-70/40	410	32	22	240	20	8.8	55.4	0.8
JXGY-95-55	LGJ-95/55	430	38	25	150	24	19	74.2	0.92
JXGY-120-70	LGJ-120/70	340	36	25.5	160	25	19	93.5	0.92
JXGY-150-25	LGJ-150/25	320	30	18	85	26	12	51.4	0.35
JXGY-185-25	LGJ-185/25	330	32	20.4	90	17.2	11.2	56.5	0.86
JXGY-185-30	LGJ-185/30	350	32	20	100	17.5	13.5	61.1	0.8
JXGY-240-30	LGJ-240/30	430	36	23.3	130	21.2	13.2	71.9	0.95
JXGY-240-40	LGJ-240/40	450	36	23.5	130	21.3	13.3	79.2	0.97
JXGY-240-55	LGJ-240/55	530	38	24	160	22	16.5	97	1.08
JXGY-300-20	LGJ-300/20	420	40	25	100	14	9.8	71.9	1.07
JXGY-300-25	LGJ-300/25	430	36	25.5	110	23.4	18.5	79.3	1.1
JXGY-300-40	LGJ-300/40	430	40	25.5	110	22	17	87.6	1
JXGY-300-50	LGJ-300/50	450	40	26	120	22	17	98.3	1.01
JXGY-300-70	LGJ-300/70	510	42	27	150	24	19	121.6	1.35
JXGY-400-35	LGJ-400/35	530	45	28.5	150	26	15	98.7	1.74
JXGY-400-50	LGJ-400/50	510	45	29.5	130	24	17	117.3	1.8
JXGY-400-65	LGJ-400/65	520	48	29.5	140	26	21	128.5	1.9
JXGY-400-95	LGJ-400/95	550	48	31	170	28	22	162.8	2.1
JXGY-500-65	LGJ-500/65	560	52	32.5	140	24	19	146.3	2.21

The outer sleeve is aluminum. the inner sleeve is hot-dip galvanized steel

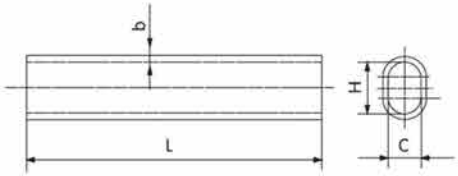
6.17.7 Splicing sleeves for ACSR conductor(Compression with plicere)



HE Code	Suitable Conductor	Dimensions(mm)					Grip Strength (kN)	Weight (kg)
		b	C	H	L	L1		
JXLQ-10-2	LGJ-10/2	1.7	5	11	170	180	3.9	0.05
JXLQ-16-3	LGJ-16/3	1.7	6	14	210	220	5.8	0.07
JXLQ-25-4	LGJ-25/4	1.7	7.8	16	270	280	8.8	0.08
JXLQ-35-6	LGJ-35/6	2.1	8.8	18	340	350	12	0.17
JXLQ-50-8	LGJ-50/8	2.3	10.5	22	420	430	16	0.23
JXLQ-70-10	LGJ-70/10	2.6	12.5	26	500	510	22	0.34
JXLQ-95-15	LGJ-95/15	2.6	15	31	690	700	33	0.52
JXLQ-95-20	LGJ-95/20	2.6	15.2	31.5	690	700	35	0.55
JXLQ-120-7	LGJ-120/7	3.1	16	33	910	920	26	0.6
JXLQ-120-20	LGJ-120/20	3.1	17	35	910	920	39	0.91
JXLQ-150-8	LGJ-150/8	3.1	17.5	36	940	950	31	1.05
JXLQ-150-20	LGJ-150/20	3.1	18	37	940	950	44	1.1
JXLQ-150-25	LGJ-150/25	3.1	19	39	940	950	51	1.15
JXLQ-185-10	LGJ-185/10	3.4	19.5	40	1040	1050	39	1.4
JXLQ-185-25	LGJ-185/25	3.4	21	43	1040	1050	56	1.42
JXLQ-185-30	LGJ-185/30	3.4	21	43	1040	1050	61	1.5
JXLQ-210-10	LGJ-210/10	3.6	21	43	1070	1080	43	1.52
JXLQ-210-25	LGJ-210/25	3.6	21.5	45	1070	1080	63	1.58
JXLQ-210-35	LGJ-210/35	3.6	22	46	1070	1080	71	1.62
JXLQ-240-30	LGJ-240/30	3.9	23.5	48	540	550	72	1
JXLQ-240-40	LGJ-240/40	3.6	23.5	48	540	550	79	1

Material is aluminum.

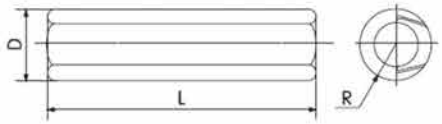
6.17.8 Splicing sleeves for Aluminium conductor(Compression with plicere)



HE Code	Suitable Conductor	Dimensions (mm)				Grip Strength (kN)	Weight (kg)
		b	C	H	L		
JXAQ-16L	LJ-16	1.7	12	6	110	2.7	0.02
JXAQ-25L	LJ-25	1.7	14.4	7.2	120	4.1	0.03
JXAQ-35L	LJ-35	1.7	17	8.5	140	5.5	0.04
JXAQ-50L	LJ-50	1.7	20	10	190	7.5	0.05
JXAQ-70L	LJ-70	1.7	23.7	11.7	210	10	0.07
JXAQ-95L	LJ-95	1.7	26.8	13.4	280	14	0.1
JXAQ-120L	LJ-120	2	30	15	300	18	0.15
JXAQ-150L	LJ-150	2	34	17	320	22	0.16
JXAQ-185L	LJ-185	2	38	19	340	27	0.2
JXAQ-240L	LJ-240	3.6	42	21.5	380	34.5	0.28

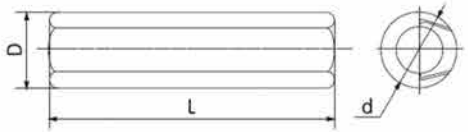
Material is aluminum.

6.17.9 Repair sleeves for ACSR conductor,steel wire



HE Code	Suitable Conductor	Dimensions (mm)			Weight (kg)
		D	R	L	
JXRX-70-10	LGJ-70/10	22	6.25	150	0.11
JXRX-70-40	LGJ-70/40	24	8.1	150	0.1
JXRX-95	LGJ-95/15/20	24	7.25	170	0.14
JXRX-95-55	LGJ-95/55	32	9	170	0.26
JXRX-120	LGJ-120/7/20	30	8.25	170	0.23
JXRX-150	LGJ-150/20/25	30	9	170	0.21
JXRX-150-35	LGJ-150/35	32	9.5	170	0.24
JXRX-185-10	LGJ-185/10	32	10	170	0.23
JXRX-185	LGJ-185/25/45	32	10.5	170	0.22
JXRX-210	LGJ-210/25/35	34	11	220	0.32
JXRX-240	LGJ-240/30/40 210/50	36	11.5	220	0.36
JXRX-240-55	LGJ-240/55	36	12	220	0.34
JXRX-300-15	LGJ-300/15	40	12.5	270	0.56
JXRX-300	LGJ-300/20/25/40/50	40	13	270	0.53
JXRX-300-70	LGJ-300/70	42	13.5	270	0.6
JXRX-400	LGJ-400/20/25/35/50	45	14.5	320	0.81
JXRX-400-65	LGJ-400/65	48	15	320	0.96
JXRX-400-95	LGJ-400/95	48	15.5	320	0.92
JXRX-500	LGJ-500/35/45/65	52	16	320	1.15
JXRX-560-40	LGJ-560/40	60	17	340	1.77
JXRX-630	LGJ-630/45/55/80	60	18	370	1.81
JXRX-800-55	LGJ-800/55	65	20	370	2.06
JXRX-800	LGJ-800/70/100	65	20.5	370	2.01

Material is aluminum.

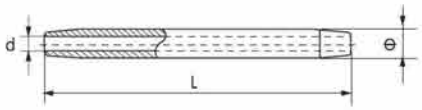


HE Code	Suitable Conductor	Dimensions (mm)			Weight (kg)
		D	R	L	
JX-25G	GJ-25	14	7.2	100	0.09
JX-35G	GJ-35	16	8.4	120	0.12
JX-50G	GJ-50	18	9.6	120	0.15
JX-55G	GJ-55	20	10.3	120	0.23
JX-70G	GJ-70	22	11.6	140	0.26
JX-80G	GJ-800	24	12	140	0.38
JX-l00G	GJ-100	26	14	160	0.48
JX-120G	GJ-120	28	15	170	0.59
JX-150G	GJ-150	32	16.5	200	0.93

6.18 Splicing tube and insulation cover

This series connecting tube, suitable for overhead line in1kV, 10kV, 20Kv overhead insulated conductor Connection, connection pipe and our company special insulation cover supporting the use of insulation, protective effect.

Insulation cover

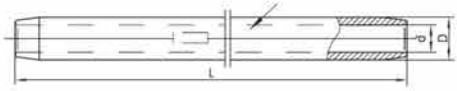


Splicing tube

Specification：

HE Code	Suitable Conductor	Dimensions (mm)			Grip strength (kN)	Insulation cover type
		d	ø	L		
STIC-35	JKLYJ-35	7.6	20	130	4.9	JY-35/50
STIC-50	JKLYJ-50	9.0	20	140	6.7	
STIC-70	JKLYJ-70	11.0	22	170	9.8	JY-70/95
STIC-95	JKLYJ-95	12.5	24	180	13.0	
STIC-120	JKLYJ-120	14.0	26	210	16.5	JY-120/150
STIC-150	JKLYJ-150	15.5	28	240	20.0	
STIC-185	JKLYJ-185	17.0	32	260	25.4	JY-1851240
STIC-240	JKLYJ-240	19.5	34	290	33.0	
STIC-300	JKLYJ-300	22.0	36	310	38.7	JY-300

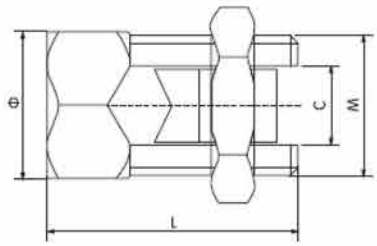
Aluminum tube



Stee tube

HE Code	Suitable Conductor	Dimensions (mm)						Grip strength (kN)
		L	D	d	L1	D1	d1	
STIC-70-10	JKLGYJ70/10	360	26	13.0	110	12	4.5	21.0
STIC-95-15	JKLGYJ95/15	430	26	15.0	130	14	5.7	31.5
STIC-120-20	JKLGYJ120/20	430	30	16.0	130	14	6.2	36.9
STIC-150125	JKLGYJ150/25	500	30	18.5	150	14	7.0	48.7
STIC-185-25	JKLGYJ185/25	520	32	20.5	150	14	7.0	53.5
STIC-240-30	JKLGYJ240/30	570	36	23.0	170	16	7.9	68.0

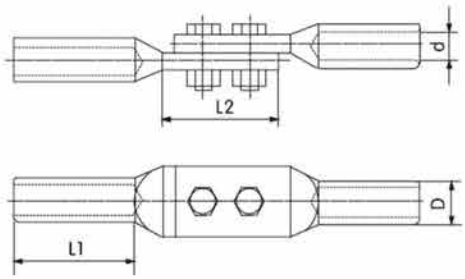
6.19 Copper bolt clamp



HE Code	Main dimensions(mm)			
	L	M	C	Ø
CBCT-16	27	10.6	5	12
CBCT-25	27	13.3	7.5	13.8
CBCT-35	30	17	9.8	18
CBCT-50-70	42	22.6	12.4	24
CBCT-90-120	44.8	23.6	14	26
CBCT-150-185	54	29	18.4	30
CBCT-200-240	62	31	20.8	32

Copper bolt clamp，made of brass by die casting

6.20 Jumper connectors (compression type)



HE Code	Suitable Conductor	Dimensions (mm)				Weight (kg)
		D	d	L1	L2	
HCJC-35-6	LGJ-35/6	16	9.5	60	65	0.41
HCJC-50-8	LGJ-50/8	18	11	60	65	0.45
HCJC-70-10	LGJ-70/10	22	13	70	65	0.54
HCJC-95-15	LGJ-95/15	26	15	80	65	0.62
HCJC-120-7	LGJ-120/7	26	16	80	85	0.6
HCJC-120-20	LGJ-120/20	26	16.5	80	85	0.58
HCJC-150-8	LGJ-150/8	30	17.5	90	85	0.84
HCJC-150-20	LGJ-150/20	30	18	90	85	0.84
HCJC-150-25	LGJ-150/25	30	18.5	90	85	0.84
HCJC-185-10	LGJ-185/10	32	19.5	90	85	0.94
HCJC-185-25	LGJ-185/25	32	20.5	90	85	0.9
HCJC-185-30	LGJ-185/30	32	20.5	90	85	0.9
HCJC-210-10	LGJ-210/10	34	20.5	100	85	1.18
HCJC-210-25	LGJ-210/25	34	21.5	100	85	1.14
HCJC-210-35	LGJ-210/35	34	22	100	85	1.1
HCJC-240-30	LGJ-240/30	36	23	110	85	1.21
HCJC-240-40	LGJ-240/40	36	23	100	85	1.21
HCJC-300-15	LGJ-300/15	40	24.5	110	105	1.74
HCJC-300-25	LGJ-300/25	40	25	110	105	1.74
HCJC-300-40	LGJ-300/40	40	25.5	110	105	1.74

The clamp body and is aluminum, the other parts are Hot-dip galvanized steel.

6.21 T-Connector

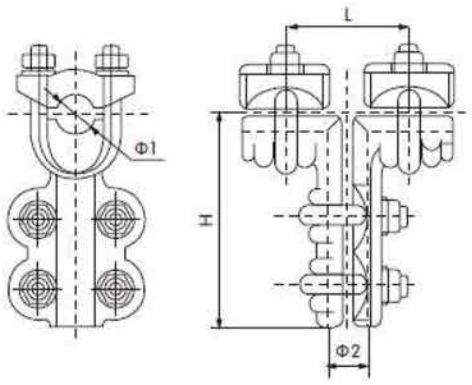
T-connectors are used to connect tap conductor with bus line the way of tee joint on overhead transmission lines or substations. The connectors include bolt type and compression type. Actually, parallel groove clamp also can be used as T-connectors for conductor of small size.

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

The arabie 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.

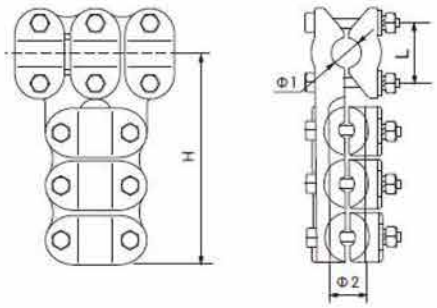
6.21.1 T-Connectors for single conductor of bolt type



HE Code	Suitable Conductor		Dimensions(mm)				Weight
	Bus	Conductor	Φ1	Φ2	H	L	(kg)
HTCS-11	7.5~9.6	75.5~9.6	10	10		118	0.71
HTCS-21	10.8~14.0	7.5~9.6	14	10		118	0.78
HTCS-22	10.8~14.0	10.8~14.0	14	14		120	0.79
HTCS-31	14.5~17.5	7.5~9.6	18	10		118	1.07
HTCS-32	14.5~17.5	10.8~14.0	18	14		120	1.06
HTCS-33	14.5~17.5	14.5~17.5	18	18		120	0.15
HTCS-41	18.1~22.0	7.5~9.6	23	10		118	1.13
HTCS-42	18.1~22.0	10.8~14.0	23	14		120	1.13
HTCS-43	18.1~22.0	14.5~17.5	23	18		120	1.12
HTCS-44	18.1~22.0	18.1~22.0	23	22		120	1.17
HTCS-51	22.4~25.2	7.5~9.6	26	10	118	120	2.6
HTCS-52	22.4~25.2	10.8~14.0	28	14	118	120	2.5
HTCS-53	22.4~25.2	14.5~17.5	28	18	118	120	2.5
HTCS-54	22.4~25.2	18.1~22.0	28	22	118	120	2.5
HTCS-55	22.4~25.2	22.4~25.2	28	28	118	120	2.5
HTCS-500-500	30.0~30.9	30.2	31	31	199	146	3.6
HTCS-630-630	33.6~34.8	32.5	34.5	34.5	199	146	3.6

Clamp bodies and keepers are aluminum,
the other parts are steel and hot-dip galvanized.

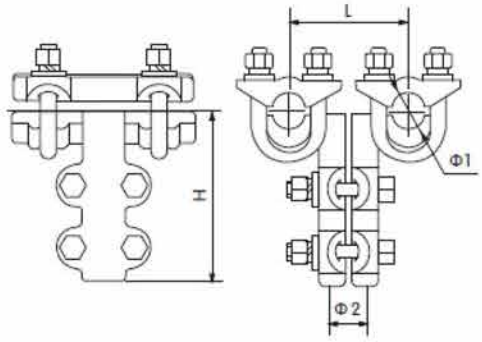
6.21.2 T-Connectors for single conductor of bolt type



HE Code	Suitable Conductor		Dimensions(mm)				Weight
	Bus	Conductor	Φ1	Φ2	H	L	(kg)
HTCS-45	185~240	300~400	22	28	210	118	2.6
HTCS-46	300~400	120~150	28	18	168		2.6
HTCS-47	300~400	185~240	28	22	168		2.7
HTCS-48	300~400	300~400	28	28	196		3
HTCS-56	300~400	500~630	28	35	196		3.1
HTCS-64	500~630	185~240	35	22	196		3.3
HTCS-65	500~630	300~400	35	28	196		3.4
HTCS-66	500~630	500~630	35	35	196		3.6

Clamp bodies and keepers are aluminum,
the other parts are steel and hot-dip galvanized.

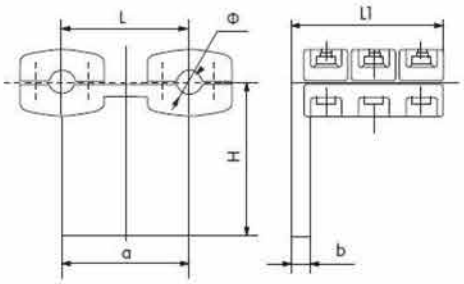
6.21.3 T-Connectors for double-bundle conductor



HE Code	Suitable Conductor		Dimensions(mm)				Weight (kg)
	Bus	Conductor	Φ1	Φ2	H	L	
HTCD-44	185~240	185~240	22	22	120	120	3.2
HTCD-45	185~240	300~400	22	28	160	120	3.4
HTCD-53	300~400	120~150	28	18	160	120	3.6
HTCD-54	300~400	185~240	28	22	122	120	3.7
HTCD-55	300~400	300~400	28	28	160	120	3.9
HTCD-56	300~400	500~630	28	34.5	170	120	4.1
HTCD-65	500~630	300~400	34.5	28	180	120	4.5
HTCD-66	500~630	500~630	34.5	34.5	180	120	4.8
HTCD-5-3-200	500	300	31	25	180	200	5.5
HTCD-14-3-200	1400	300	52	25	180	200	6.5
HTCD-14-14-200	1400	1400	52	52	180	200	6.8
HTCD-144N-144N-200	1440	1400	52	52	180	200	11.8
HTCD-44-400	185~240	185~240	22	22	140	400	4.8
HTCD-45-400	185~240	300~400	22	25	160	400	5
HTCD-55-400	300~400	300~400	25	25	180	400	6

Clamp bodies and keepers are aluminum,
the other parts are steel and hot-dip galvanized.

6.21.4 T-Connectors for double-bundle conductor of bolt type



HE Code	Suitable Conductor	Dimensions(mm)						Weight (kg)
		Φ	H	a	b	L	L1	
HTCD-2-400-120	LGJ-400 LGJQ-400	28.5	153	120	20	120	157	4.5

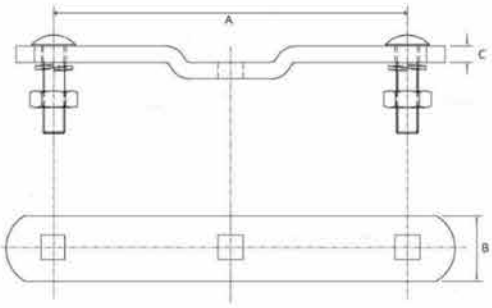
The tightening parts are steel and hot- dip galvanized,
the other parts are aluminum.

Crossarms

7.1 Crossarm Brackets

7.1.1 Cross Straps

Cross straps are produced to mount two units of apparatus.
Straps are assembled with 2 carriage bolts, 2 hexagonal nuts and 2 spring washers.

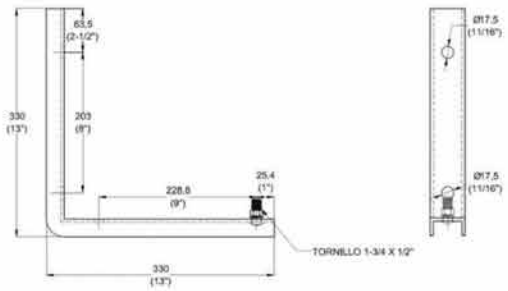


HE Code	Dimensions			Carriage bolt	Spring washer	Hex nut UNC	Wt. kg
	A	B	C				
CS12	8.1/2" (215.9)	1.1/2" (38.1)	3/8" (9.5)	1/2"x2"	1/2"	1/2"	1.043

Cross straps are produced in carbon steel SAE 1010 to 1020, hot dip galvanizing to ASTM A-153.

7.1.2 L Brackets

L crossarm brackets are produced to mount a variety of apparatus on crossarms or poles .
Brackets can be mounted with the vertical equipment running either up or down the pole.
Brackets are assembled with carriage bolts and washers.



HE Code
HEFS-3300

Material steel ASTM A663 or A675 is hot dip galvanized to ASTM A153.

7.1.3 Twisted Link Brackets

Twisted link brackets are produced to attachment guys to buildings walls at an 45°angle or carry guys around the building corner of a building with 2 mounting bolts.
Holes are designed for porcelain spool insulators and mounting bolts.

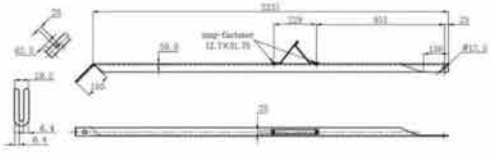
HE Code
TW12

Raw material: ductile iron
Finish: hot dip galvanized according with ASTM A153

7.2 Crossarms Braces and Gains

7.2.1 Alley Arm Braces

Alley arms braces are produced for side arm construction, used to support distribution conductors on one side of pole.
Arms are assembled with lineman's steps.
Alley arms braces are hot formed with equal leg angle.

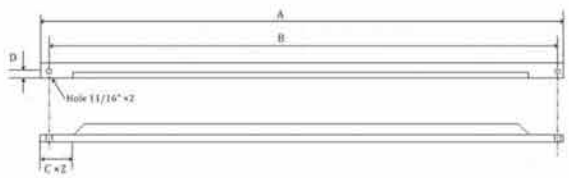


HE Code
CBA2337-6

Material steel is hot dip galvanized to ASTM A153.
Different size could be customizable.
Code definition：CBA-23(length)-37(angle width)-6(thickness)

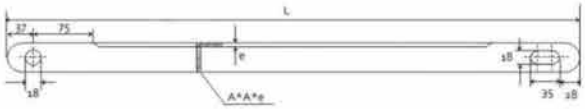
7.2.2 Angle Crossarm Braces

Angle crossarm braces are produced to support multiple cross arms in overlap way.



HE Code	Dimensions			
	A	B	C	D
CBV50	50″	48″	4 1/2″	3/4″
CBV74	74″	72″	4 1/2″	7/8″

Material: carbon steel
Finish: hot dip galvanized

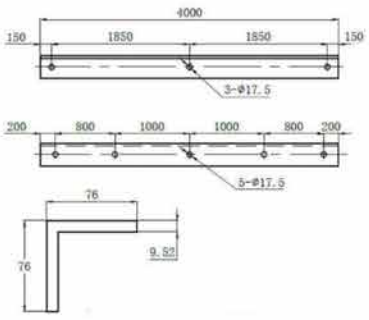


HE Code	Dimensions			Wt.
	A	e	L	kg
CBV02-38-710	38(1 1/2")	4.5(3/16")	710(28")	1.9
CBV02-38-900	38(1 1/2")	4.5(3/16")	900(35 1/2")	2.4
CBV02-38-1350	38(1 1/2")	4.5(3/16")	1350(53")	3.6
CBV02-51-800	51(2")	6.35(1/4")	800(31 1/2")	3.8
CBV02-51-910	51(2")	6.35(1/4")	910(36")	4.32
CBV02-51-1000	51(2')	6.35(1/4")	1000(39 1/2")	4.75
CBV02-64-1200	64(2 1/2')	6.35(1/4")	1200(47")	7.32
CBV02-64-1350	64(2 1/2")	6.35(1/4")	1350(53")	8.24
CBV02-64-1500	64(2 1/2")	6.35(1/4")	1500(59")	9.15
CBV02-64-1650	64(2 1/2")	6.35(1/4")	1650(65")	10.06

Material: carbon steel
Finish: hot dip galvanized

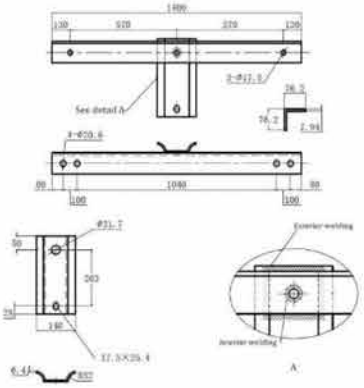
7.2.3 Angle Crossarm Braces

Angle cross arms are produced to support transmission insulators, distribution conductors and overhead ground wire on wood or steel poles.
Angle cross arms can be produced with or without steps.
Cross arms have 17.5mm(11/16") pole mounting holes. Bolts are used to fasten corner cross arms together.



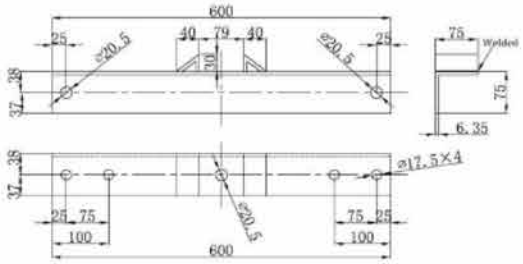
HE Code
CA01-4076-9.5

Material: carbon steel
Finish: hot dip galvanized
Different size could be customizable.
Code definition：CA01-40(length)-76(angle width)-9.5(thickness)



HE Code
CA02-1476-8

Material: carbon steel
Finish: hot dip galvanized

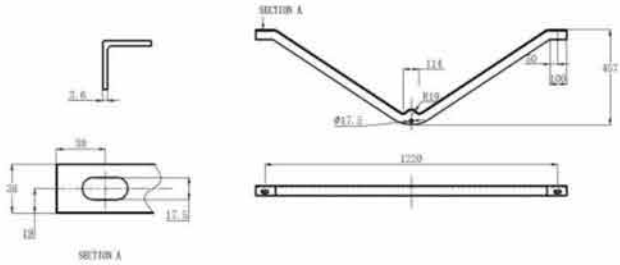


HE Code
CA03-6075-6.3

Material: carbon steel
Finish: hot dip galvanized

7.2.4 Crossarm V Braces

Crossarm V braces are produced to provide support and align for heavy duty crossarms.

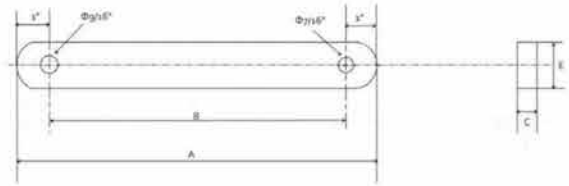


HE Code
CBV1220

Material: carbon steel
Finish: hot dip galvanized

7.2.5 Flat Crossarm Braces

Flat crossarm braces, used in pairs, are produced to align and support crossarms.
The corners can be square or rounded. Rounded corners are designed to prevent damage and lower the possibility of injury.

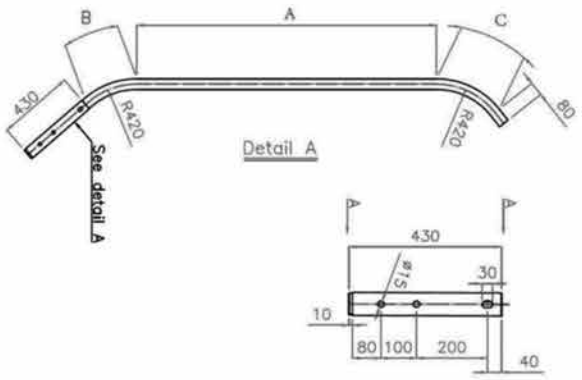


HE Code	Dimensions				Wt./100 kgs
	A	B	C	E	
HEFB-0626	26" (660.4)	24" (609.6)	1/4" (6.35)	1 1/4" (31.75)	104.33
HEFB-0628	28" (711.2)	26" (660.4)	1/4" (6.35)	1 1/4" (31.75)	108.86
HEFB-0630	30" (762.0)	28" (711.2)	1/4" (6.35)	1 1/4" (31.75)	115.67
HEFB-0632	32" (812.8)	30" (762.0)	1/4" (6.35)	1 1/4" (31.75)	124.74
HEFB-0634	34" (863.6)	32" (812.8)	1/4" (6.35)	1 1/4" (31.75)	133.81
HEFB-0636	36" (914.4)	34" (863.6)	1/4" (6.35)	1 1/4" (31.75)	142.88
HEFB-0638	38" (965.2)	36" (914.4)	1/4" (6.35)	1 1/4" (31.75)	151.95
HEFB-0520	20" (508)	18" (457.2)	7/32" (5.56)	1 7/32" (30.95)	63.5
HEFB-0526	26" (660.4)	24" (609.6)	7/32" (5.56)	1 7/32" (30.95)	83.91
HEFB-0528	28" (711.2)	26" (660.4)	7/32" (5.56)	1 7/32" (30.95)	90.72
HEFB-0530	30" (762.0)	28" (711.2)	7/32" (5.56)	1 7/32" (30.95)	97.52
HEFB-0532	32" (812.8)	30" (762.0)	7/32" (5.56)	1 7/32" (30.95)	102.06

Material: carbon steel
Finish: hot dip galvanized

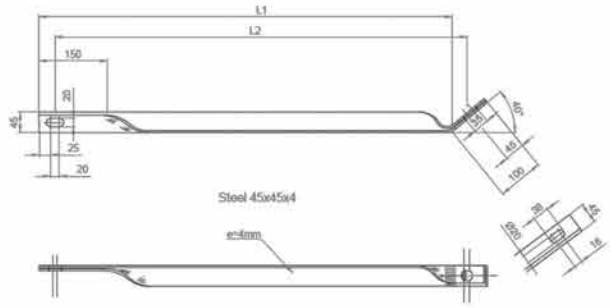
7.2.6 Lamp Arm Braces

Lamp arm braces are produced for public lighting pipe.



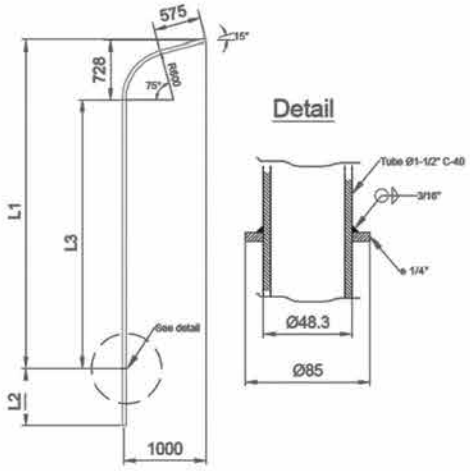
HE Code	Pipe ϕ	Thickness	A	B	C	Square	Thickness
HEBL-400	60	2.9	2662	293	366	65	2
HEBL-150	48	2.9	1689	366	366	53	2
HEBL-125	33.5	2.65	1689	366	366	38.5	2

Lamp arms are produced in carbon steel SAE 1010 to 1020, hot dip galvanized to ASTM A-153.



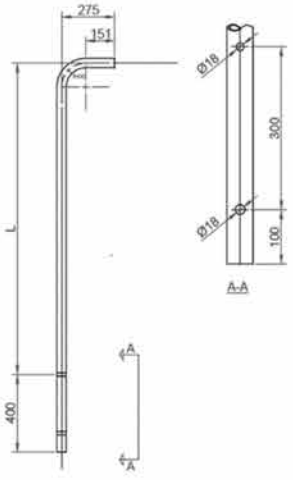
HE Code	L1(mm)	L2(mm)
HEDAC-100	1000	1000
HEDAC-107	1070	1070
HEDAC-107	1160	1160
HEDAC-120	1200	1200
HEDAC-135	1350	1350
HEDAC-140	1400	1400
HEDAC-148	1480	1480

Material: carbon steel
Finish: hot dip galvanized



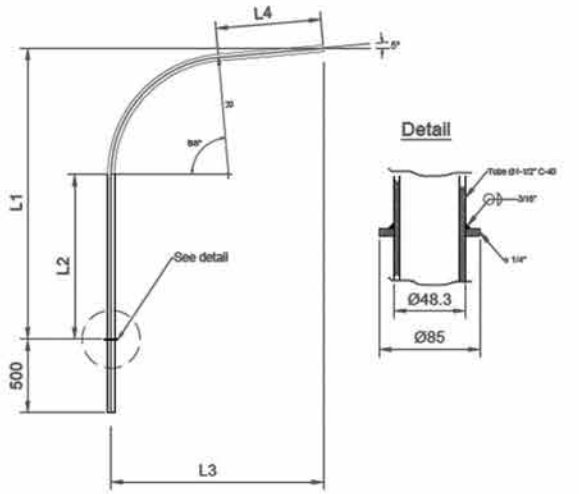
HE Code	L1(mm)	L2(mm)	L3(mm)
HEPAS-300	3000	500	2270
HEPAS-250	2500	500	1770

Material: carbon steel
Finish: hot dip galvanized



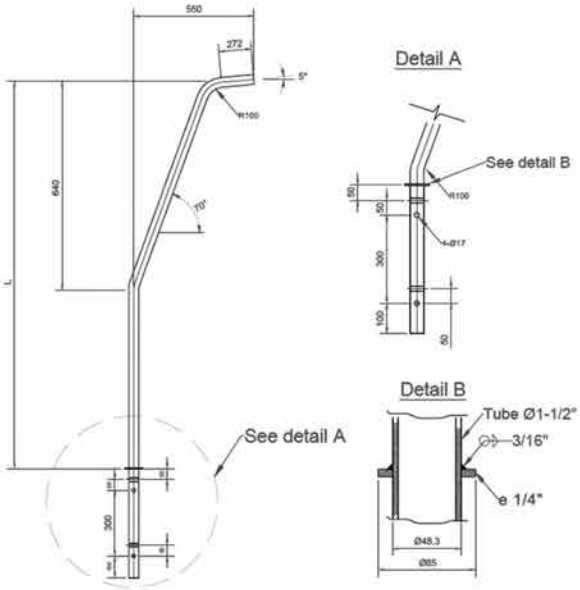
HE Code	L(mm)
HEPAS-117	1170
HEPAS-217	2170

Material: carbon steel
Finish: hot dip galvanized



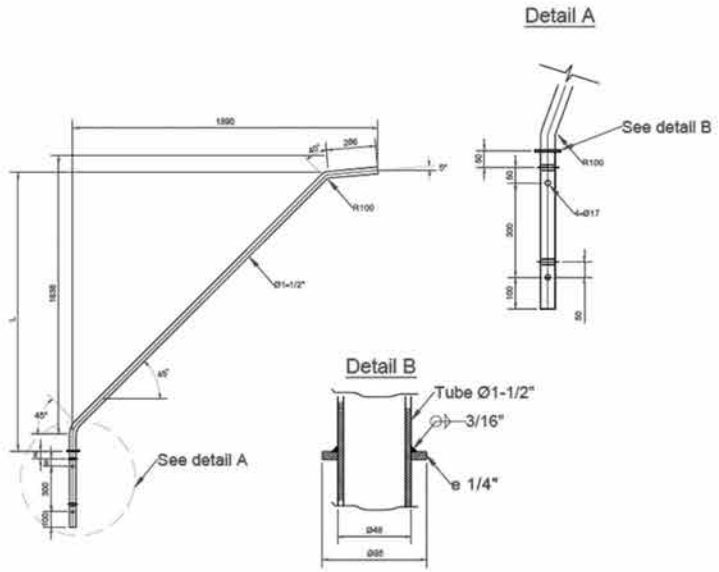
HE Code	L1(mm)	L2(mm)	L3(mm)	L4(mm)	R(mm)
HEPAS-2500	2500	1386	1500	523	1073
HEPAS-3000	3000	2345	1000	436	620

Material: carbon steel
Finish: hot dip galvanized



HE Code	L(mm)
HEPASC-117	1170
HEPASC-217	2170

Material: carbon steel
Finish: hot dip galvanized



HE Code	L(mm)
HEPASCH-174	1740
HEPASCH-117	1170
HEPASCH-217	2170

Material: carbon steel
Finish: hot dip galvanized

7.2.7 Square Tube Crossarm

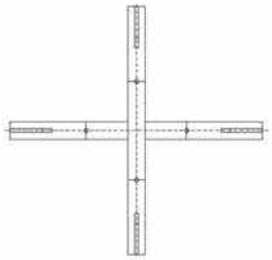
Square tube type crossarm are produced mainly for Philippine market.

HE Code	Length	WxW	Thickness
HESQ3410	3000	75×100	3
HESQ3408	2400	75×100	3

Material high quality steel is hot dip galvanized to ASTM A153.

7.3 Cable Storage Assembly (For optical cables)

It is used to place excess optical cables on the connecting pole tower and is used in conjunction with the optical cable connector box.

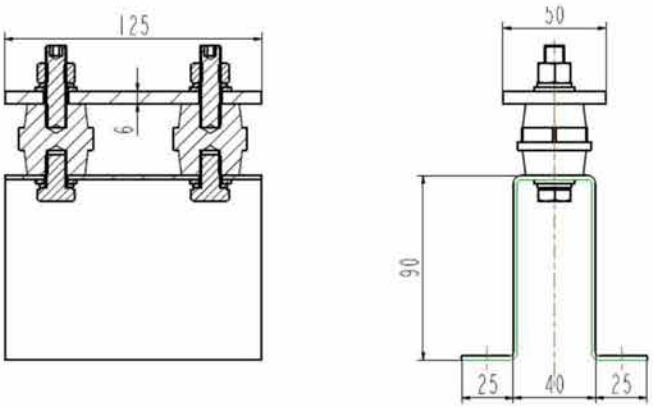


Product	Code	Dimensions		Configure	Applicable optical cable range
		L(mm)	Wt. (kg)		
Cable Storage Assembly	TJY 660-T	660	4.1	small splint	ADSS optical cable, cable diameter≤14.8
	TJY 1000-T	1000	7.7	small splint	ADSS optical cable, cable diameter≤14.8 OPGW optical cable, cable diameter≤14.8
	TJY 1200-T	1200	11.8	small splint	OPGW optical cable, cable diameter>14.8
Cable Storage Assembly	TJY 660-H*	660	4.1	Support for pole	ADSS optical cable, cable diameter≤14.8
	TJY 1000-H*	1000	7.7	Support for pole	ADSS optical cable, cable diameter≤14.8 OPGW optical cable, cable diameter≤14.8
	TJY 1200-H*	1200	11.8	Support for pole	OPGW optical cable, cable diameter>14.8

Earthing

8.1 Earth Removable Link

Solid drawn copper earth bar with a disconnecting link that allows the system to be checked safety by pulling the link across and is mainly used in the connection, inspection and testing of earthing systems



HE Code: HERL
400 Amp Rated
solid copper plate: 50x 6mm (Height)
Pre Drilled Galvanized Steel Base
M10 Brass Bolts
M10 Reinforced Polyester Supports with Brass Inserts
125mm Length

8.2 Earthing Rod Connectors

Ground rod clamps are produced to provide high pressure contact between rods and copper ground wires.

Ground rod clamps are made of electrical bronze.
They are assembled with hex bolts, yellow zinc plated.

HE Code	Rod dia.	Conductor section	Wt.
		mm^2	gram
HEGRC-1	1/2″	16-50	38
HEGRC-2	5/8″	16-70	44
HEGRC-3	3/4″	35-95	48

Material: copper

8.3 Earthing rod coupling

Ground rod coupling clamps are produced to connect two rods to realize an extension for the ground rod.

HE Code	Rod dia.	Length
		mm
HETC-1012	1/2"	60
HETC-1058	5/8″	67
HETC-1034	3/4″	80

Ground rod coupling clamps are made of electrical bronze or brass.

8.4 Earthing Wire

High strength copper clad steel wire

Conductivity:25% , 30% , 30%.
Excellent performance of anti-corrosion
Really soft state features, which is convenient for construction.
Fulfil the electric power industry standard DL/T1312-2013 and ASTM B228.
High strength copper clad steel wire

High strength copper clad steel stranded wire accord with standard of American standard ASTMB228-04, used in electric carrier cable circuit, power and earthing conductor.

Strand specification														
Strand		Cross	Tensile (Mpa)						Weight (KG/KM)			Electric resistance (20℃)		
AWG	Diameter	Section	Hard Status			Soft Status						Ω/Km		
	mm	mm²	40%	30%	25%	40%	30%	25%	40%	30%	25%	40%	30%	25%
			Conductivity	Conductivity	Conductivity	Conductivity	Conductivity	Conductivity	Conductivity	Conductivity	Conductivity	Conductivity	Conductivity	Conductivity
NO.0	8.25	53.49	450	480	500	295	310	320	440.5	435.9	433.01	0.81	1.07	1.29
NO.1	7.35	42.41	450	480	500	295	310	320	349.2	345.6	343.26	1.02	1.36	1.63
NO.2	6.54	33.62	450	480	500	295	310	320	276.9	274	272.19	1.28	1.71	2.05
NO.3	5.83	26.67	500	530	550	295	310	320	219.6	217.3	215.87	1.62	2.16	2.59
NO.4	5.19	21.15	500	530	550	295	310	320	174.2	172.3	171.24	2.04	2.72	3.26
NO.5	4.62	16.77	500	530	550	295	310	320	138.1	136.6	135.75	2.57	3.43	4.11
NO.6	4.11	13.3	550	580	600	295	310	320	109.5	108.4	107.64	3.24	4.32	5.19
NO.7	3.67	10.55	550	580	600	295	310	320	86.89	85.98	85.41	4.09	5.45	6.54
NO.8	3.26	8.37	550	580	600	295	310	320	68.9	68.18	67.73	5.15	6.87	8.24
Copper Clad Earth Wire Specification														
						Tensile (KN)								
						3 Strands								
3NO.5	9.2	50.31	23.9	25.3	26.3	14.1	14.8	15.3	413.55	409.77	407.01	0.86	1.15	1.84
3NO.4	10.9	63.45	30.1	31.9	33.1	17.8	18.7	19.3	521.56	516.8	513.31	0.69	0.91	1.46
3NO.3	11.9	80.01	38	40.3	41.8	22.4	23.5	24.3	657.68	651.68	647.28	0.54	0.72	1.16
3NO.2	12.7	100.86	43.1	46	47.9	28.3	29.7	30.6	829.07	821.5	815.96	0.44	0.59	0.94
3NO.1	14.2	127.23	54.4	58	60.4	35.6	37.5	38.7	1045.83	1036.29	1029.29	0.34	0.46	0.73
						7 Strands								
7NO.8	9.5	58.59	29	30.6	31.6	15.5	16.3	16.9	482.2	476.92	473.41	0.74	0.99	1.59
7NO.7	10.5	73.85	36.5	38.5	39.9	19.6	20.6	21.3	607.79	601.14	596.71	0.58	0.78	1.25
7NO.6	12.1	93.1	46.1	48.6	50.3	24.7	26	26.8	766.21	757.83	752.25	0.47	0.62	1
7NO.5	13.2	117.39	52.8	56	58.1	31.2	32.7	33.8	966.12	955.55	948.51	0.37	0.49	0.79
7NO.4	15.5	148.05	66.6	70.6	73.3	39.3	41.3	42.6	1218.45	1205.13	1196.24	0.29	0.39	0.63
7NO.3	17.1	186.69	84	89	92.4	49.6	52.1	53.8	1536.46	1519.66	1508.46	0.24	0.32	0.52
						19 Strands								
19NO.6	20.57	252.7	125	131.9	136.4	67.1	70.5	72.8	2079.72	2056.98	2041.82	0.17	0.23	0.37
19NO.5	23.1	318.63	143.4	152	157.7	84.6	88.9	91.8	2622.32	2593.65	2574.53	0.14	0.18	0.29
19NO.4	26.5	401.85	180.8	191.7	198.9	106.7	112.1	115.7	3307.23	3271.06	3246.95	0.11	0.15	0.23
19NO.3	30.4	506.73	228	241.7	250.8	134.5	141.4	145.9	4170.39	4124.78	4094.38	0.09	0.12	0.19

8.5 Earthing Wire Plastic Cover

The Ground rod plastic cover are designed to protect the earthing rod
Using UV resistant PE as raw material, grounding wire cover provides strong, reliable protection of exposed ground wire.
Easily secured to the pole with available diamond point staples or stainless steel zip tie, easily manual installing, economic and safe.
Comply with ASTM D 1784

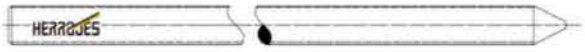
Code	Size	A	B	L	C
UCG-12	1/12*8'	13mm	13mm	900mm	1.6mm

Material: PE

8.6 Grounding Rod

Copper bonded earth rod has advantages of high conductivity and anti-corrosion. It is easy to install.
Applying 99.95% pure copper on low carton steel by electric plating. It is a molecularly bonding.
Production strictly follows international standards such as UL467 and BS7430.
Copper layer is usually 254 microns. Nominal diameters are 1/2",5/8" and 3/4". Earth rod can be threaded and non-threaded.

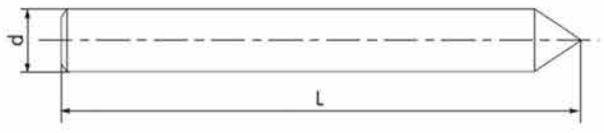
8.6.1 Grounding Rod



HE Code	Diameter(mm)	Length(mm)	Inch
HEER-1215	11.2	1500	1/2"
HEER-1218	11.2	1800	1/2"
HEER-1224	11.2	2400	1/2"
HEER-1615	14.2	1500	5/8"
HEER-1618	14.2	1800	5/8"
HEER-1624	14.2	2400	5/8"
HEER-1915	17.2	1500	3/4"
HEER-1918	17.2	1800	3/4"
HEER-1924	17.2	2400	3/4"

Material: Copper clad steel, could be with or without thread
Code definition:-T with thread, Eg. HEER-1215-T

8.6.2 Grounding Rod with thread

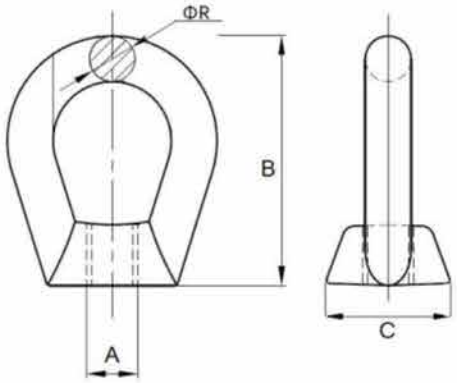


HE Code	Dimensions(mm)		Weight(kg)	Note
	d	L		
HERT-1410	14	1000	1.25	Copper coated
HERT-1420	14	2000	2.50	
HERT-1610	16	1000	1.68	
HERT-1620	16	2000	3.36	
HERT-1630	16	3000	4.95	

Material: Copper clad steel

Eyelets and Eyenuts

9.1 Oval Eyenuts



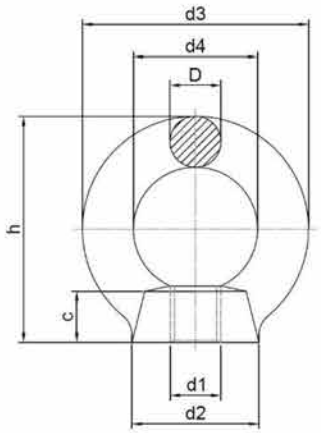
Standard oval eyenuts are produced for hanging suspension and strain insulator strings or thimble clevises from cross arms.
Eyenuts are installed on the threaded ends of crossarm bolts.
Eye nuts are offered in oval eye style and thimble eye style.

HE Code	Dimensions				Wt.	Ultimate tensile strength (lbs)
	A	B	C	ΦR	kg	
EN12	1/2"	2 5/8"	1 1/4"	1/2"	0.227	7800
EN58	5/8"	3"	1 3/8"	9/16"	0.272	13550
EN34	3/4"	3"	1 3/8"	9/16"	0.272	20050
EN78	7/8"	4 5/16"	1 7/8"	11/16"	0.525	25400

The material is carbon steel Q235 or ductile iron to ASTM A536, hot dipped galvanized to ASTM A153.

9.2 Round Eyenuts

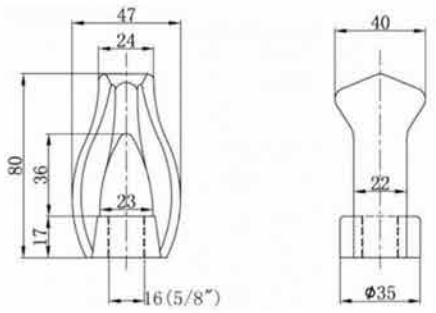
Eye nuts are typically used in conjunction with screws, bolts or threaded rods. The lifting ring nut is fixed by the inner thread, and the lifting round nut and the screw of the same specification can be connected together.
The lifting round nut is a part that tightly connects the mechanical equipment.
Most of it is used in conjunction with the external thread to lift various equipment.
It is a commonly used fixed pendant in engineering, such as molds, chassis, motors, etc.



HE Code	d1	d2	d3	d4	h	e	D	WT(kg)
HEEN-M6	M6	17	28	16	30	8	6	0.023
HEEN-M8	M8	20	35	20	35	8	8	0.043
HEEN-M10	M10	25	45	25	44	10	12	0.08
HEEN-M12	M12	29	53	30	52	12	10	0.138
HEEN-M14	M14	30	53	30	52	14	12	0.126
HEEN-M16	M16	35	63	35	62	16	14	0.234
HEEN-M18	M18	37	67	37	66	17	15	0.282
HEEN-M20	M20	40	71	40	70	18	16	0.34
HEEN-M24	M24	47	87	48	87	18	20	0.558
HEEN-M30	M30	55	104	54	104	30	25	1.053
HEEN-M36	M36	75	126	70	126	30	28	2.08

Raw material: carbon steel
Finish: hot dip galvanized

9.3 Thimble Eyenuts

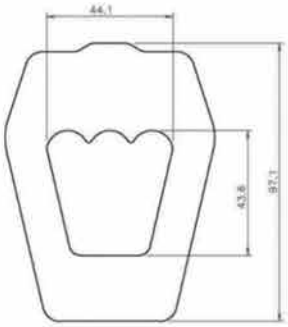


Thimble eye nuts are produced to tie to through bolts or threaded end of thimble eye bolts for straight-away head guys, manufactured for high strength applications.
Eye nuts are suitable for diameter 5/8" rods or bolts.

HE Code	Wt.
	kg
ENT58	0.354

The material is drop-forged galvanized steel.
Diameter 3/4" and 1" share the same dates.

9.4 Triple Eyenuts



Triple eyenuts are produced for head or stub guying of three strands, used with thimble bolts as well.
Grooves are contoured to protect guy strands from bending and kinking under tensions.

HE Code	Size
HEEN-3001	3/4″

Raw material: carbon steel SAE 1020, ductile iron
Finish: hot dip galvanized

Fasteners

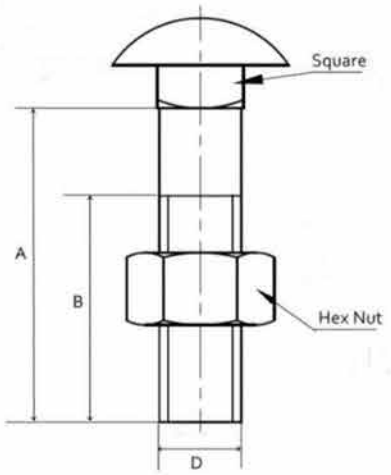
10.1 Bolts

10.1.1 Carriage Bolts

Carriage bolts are generally used to attach cross arms.

Carriage bolts have standard square shoulders, finished points and rolled threads. Square shoulders prevent turning of the bolt when tightening.

Oval shoulders are available as well.



HE Code	Dimensions			Tensile Strength (lbs)	Wt. kg
	A	B	D		
CB3802	2" (50.8)	2" (50.8)	3/8″ (9.53)	4,250	0.036
CB3803	3" (76.2)	2" (50.8)	3/8″ (9.53)	4,250	0.054
CB3804	4" (101.6)	3" (76.2)	3/8″ (9.53)	4,250	0.064
CB380412	4.1/2" (114.3)	3" (76.2)	3/8″ (9.53)	4,250	0.073
CB3805	5" (127.0)	3" (76.2)	3/8″ (9.53)	4,250	0.077
CB380512	5 1/2″ (139.7)	3" (76.2)	3/8″ (9.53)	4,250	0.082
CB3806	6" (152.4)	3" (76.2)	3/8″ (9.53)	4,250	0.086
CB3807	7" (177.8)	3" (76.2)	3/8″ (9.53)	4,250	0.1
CB3808	8" (203.2)	3" (76.2)	3/8″ (9.53)	4,250	0.109
CB38010	10" (254)	3" (76.2)	3/8″ (9.53)	4,250	0.132
CB38012	12" (304.8)	3" (76.2)	3/8″ (9.53)	4,250	0.154
CB1202	2" (50.8)	2" (50.8)	1/2″ (13)	7,800	0.064
CB120212	2 1/2" (63.5)	2 1/2" (63.5)	1/2″ (13)	7,800	0.073
CB1203	3" (76.2)	2.1/2" (63.5)	1/2″ (13)	7,800	0.077
CB1204	4" (101.6)	4" (101.6)	1/2″ (13)	7,800	0.104
CB120412	4.1/2" (114.3)	3" (76.2)	1/2″ (13)	7,800	0.136
CB1205	5" (127.0)	3" (76.2)	1/2″ (13)	7,800	0.145
CB120512	5 1/2" (139.7)	3" (76.2)	1/2″ (13)	7,800	0.159
CB1206	6" (152.4)	3" (76.2)	1/2″ (13)	7,800	0.163
CB1207	7" (177.8)	4" (101.6)	1/2″ (13)	7,800	0.186
CB1208	8" (203.2)	4" (101.6)	1/2″ (13)	7,800	0.209
CB580112	1 1/2" (38.1)	1 1/2" (38.1)	5/8″ (16)	12400	0.086
CB5802	2" (50.8)	1.5/8" (41)	5/8″ (16)	12400	0.109
CB580212	2.1/2" (63.5)	1.5/8"(41)	5/8″ (16)	12400	0.141
CB5803	3" (76.2)	2.1/2" (63.5)	5/8″ (16)	12400	0.163
CB5804	4" (101.6)	3" (76.2)	5/8″ (16)	12400	0.172
CB5805	5" (127.0)	3" (76.2)	5/8″ (16)	12400	0.24
CB580512	5 1/2" (127.0)	3" (76.2)	5/8″ (16)	12400	0.209
CB5806	6" (152.4)	3" (76.2)	5/8″ (16)	12400	0.236
CB5807	7" (177.8)	4" (101.6)	5/8″ (16)	12400	0.245
CB5808	8" (203.2)	4" (101.6)	5/8″ (16)	12400	0.263

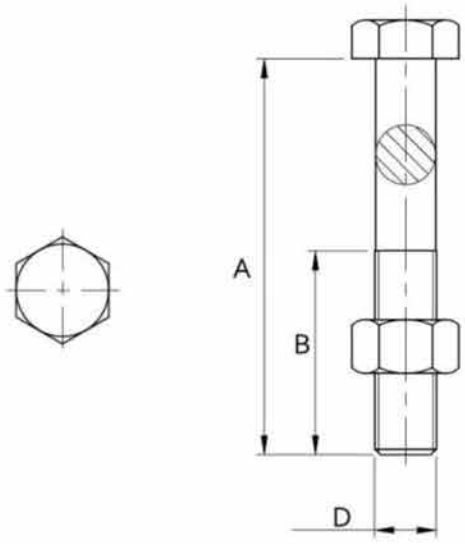
Bolts are made of high quality carbon steel SAE 1010 to 1/20, hot dip galvanized according to ASTM A-153.

10.1.2 Clevis Bolts

Clevis bolts are produced to provide deadend connections to eyes or links; to support crossarm suspension insulator strings.
Clevis end includes a machine bolt with nut and stainless steel self-locking cotter key to provide a secure vibration proof assembly.

Bolts are made of high quality carbon steel SAE 1010 to 1020, hot-dip galvanized to ASTM A-153.

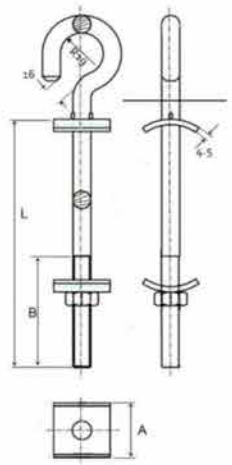
10.1.3 Hex Bolts



He Code	A	B	Dia.	D(mm)	Hex Nut(s)	Wt. kg
HB12-3	3″	3″	1/2″	12.7	1	0.113
HB12-4	4″	4″	1/2″	12.7	1	0.15
HB12-5	5″	5 “	1/2″	12.7	1	0.188
HB12-6	6″	6″	1/2″	12.7	1	0.2
HB12-7	7″	6″	1/2″	12.7	1	0.233
HB12-8	8″	6″	1/2″	12.7	1	0.25
HB12-9	9″	6”	1/2″	12.7	1	0.281
HB12-12	12″	6”	1/2″	12.7	1	0.35
HB58-4	4″	4″	5/8″	15.87	1	0.22
HB58-5	5″	5 “	5/8″	15.87	1	0.275
HB58-6	6″	6″	5/8″	15.87	1	0.3
HB58-7	7″	6”	5/8″	15.87	1	0.35
HB58-8	8″	6”	5/8″	15.87	1	0.37
HB58-9	9″	6”	5/8″	15.87	1	0.416
HB58-10	10″	6”	5/8″	15.87	1	0.52
HB58-11	11″	6”	5/8″	15.87	1	0.572
HB58-12	12″	6”	5/8″	15.87	1	0.6
HB58-13	13″	6”	5/8″	15.87	1	0.645
HB58-14	14″	6”	5/8″	15.87	1	0.67
HB58-15	15″	6”	5/8″	15.87	1	0.718
HB34-2	2″	2 “	3/4″	19	1	0.159
HB34-5	5″	5”	3/4″	19	1	0.329
HB34-6	6″	6″	3/4″	19	1	0.45
HB34-7	7″	6″	3/4″	19	1	0.525
HB34-8	8″	6″	3/4″	19	1	0.56
HB34-9	9″	6″	3/4″	19	1	0.63
HB34-10	10″	6″	3/4″	19	1	0.7
HB34-11	11″	6″	3/4″	19	1	0.733
HB34-12	12″	6″	3/4″	19	1	0.8
HB34-13	13″	6″	3/4″	19	1	0.871
HB34-14	14″	6″	3/4″	19	1	0.95
HB34-15	15″	6″	3/4″	19	1	1.018
HB34-16	16″	6″	3/4″	19	1	1.05
HB34-17	17″	6″	3/4″	19	1	1.086
HB34-18	18″	6″	3/4″	19	1	1.15
HB34-20	20″	6″	3/4″	19	1	1.25

10.1.4 Hook Bolts

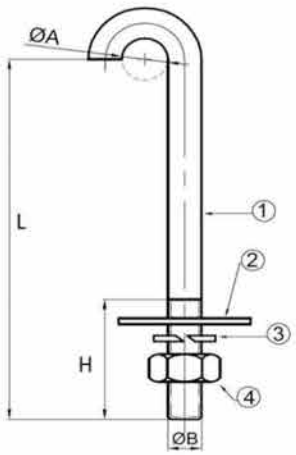
Hook bolts are produced to suspend overhead cables or covered conductors at angle or terminal poles. Anchor bolts are also used to set up in cement for construction uses.



HE Code	Dimensions(mm)			Bolt Dia.	Wt.(kg)
	A	B	L		
JHB16-156	50	102	156	16(5/8″)	0.68
JHB16-180	50	102	180	16(5/8″)	0.73
JHB16-203	50	152	203	16(5/8″)	0.82
JHB16-228	50	152	228	16(5/8″)	0.91
JHB16-254	50	152	254	16(5/8″)	0.96
JHB16-280	50	152	280	16(5/8″)	1.05
JHB16-305	50	152	305	16(5/8″)	1.17
JHB16-330	50	152	330	16(5/8″)	1.32
JHB16-356	50	152	356	16(5/8″)	1.45
M18,M20,M24 share the same data as M16.					

Material: carbon steel

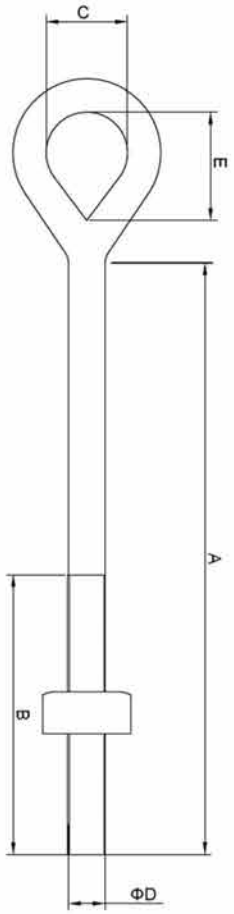
Finish: hot dip galvanized to ASTM A123



HE Code	Dimensions			
	ΦA	L	H	ΦB
JB13-140	25	140(5 1/2")	51(2")	12.7(1/2")
JB13-229	25	229(9")	76(3")	12.7(1/2")
JB13-292	25	292(11 1/2")	152(6")	12.7(1/2")
JB13-305-35	35	305(12")	102(4")	12.7(1/2")
JB13-305-60	60	305(12")	102(4")	12.7(1/2")
JB13-305-90	90	305(12")	102(4")	12.7(1/2")
JB13-305-115	115	305(12")	102(4")	12.7(1/2")
①Diameter: 12.7mm				
②40*40*5mm steel square washer H.D.G				
③Steel spring washer H.D.G				
④Steel hex nuts H.D.G				

10.1.5 Oval Eye Bolts

Oval eyebolts are produced to guy, deadend and attach clevises on wood or concrete poles. Oval eye bolts are also used in the case of specialty needs of suspension insulators and pole line hardware.

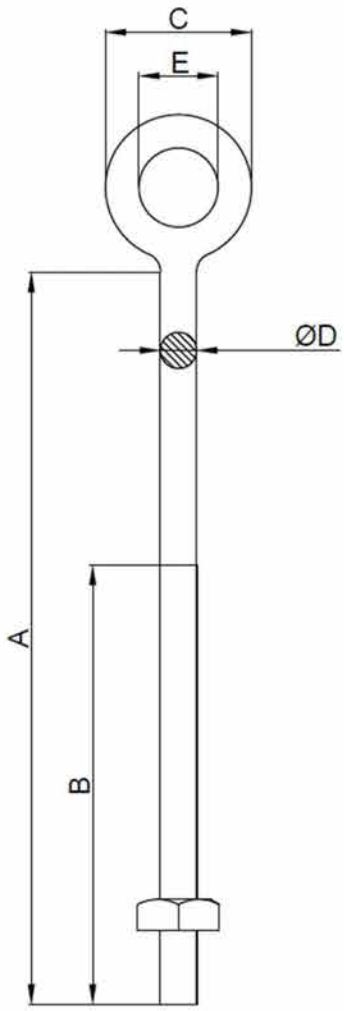


HE Code	Dimensions				Dia. ΦD	Wt. kg
	A	B	C	E		
EBO128	8" (203.2)	4" (101.6)	1"(25.4)	1 1/2"(38.1)	1/2"(12.7)	0.35
EBO1212	12" (304.8)	6" (152.4)	1"(25.4)	1 1/2"(38.1)	1/2"(12.7)	0.45
EBO586	6" (152.4)	3" (76)	1 1/2"(38.1)	2"(50)	5/8"(16)	0.45
EBO588	8" (203.2)	4" (101.6)	1 1/2"(38.1)	2"(50)	5/8"(16)	0.54
EBO589	9" (228.6)	4" (101.6)	1 1/2"(38.1)	2"(50)	5/8"(16)	0.56
EBO5810	10" (254.0)	4" (101.6)	1 1/2"(38.1)	2"(50)	5/8"(16)	0.68
EBO5812	12" (304.8)	6" (152.4)	1 1/2"(38.1)	2"(50)	5/8"(16)	0.76
EBO5814	14" (355.6)	6" (152.4)	1 1/2"(38.1)	2"(50)	5/8"(16)	0.84
EBO5816	16" (406.4)	6" (152.4)	1 1/2"(38.1)	2"(50)	5/8"(16)	0.93
EBO5818	18" (457.2)	6" (152.4)	1 1/2"(38.1)	2"(50)	5/8"(16)	1.01
EBO5820	20" (508)	6" (152.4)	1 1/2"(38.1)	2"(50)	5/8"(16)	1.13
EBO5822	22" (558.8)	6" (152.4)	1 1/2"(38.1)	2"(50)	5/8"(16)	1.22
EBO5824	24" (609.6)	6" (152.4)	1 1/2"(38.1)	2"(50)	5/8"(16)	1.32
EBO5826	26" (660.4)	6" (152.4)	1 1/2"(38.1)	2"(50)	5/8"(16)	1.36
EBO5830	30" (762)	6" (152.4)	1 1/2"(38.1)	2"(50)	5/8"(16)	1.43
EBO5836	36" (914.4)	6" (152.4)	1 1/2"(38.1)	2"(50)	5/8"(16)	1.61
EBO344	4" (101.6)	4" (101.6)	1 1/2"(38.1)	2"(50)	3/4"(19.5)	0.39
EBO348	8" (203.2)	4" (101.6)	1 1/2"(38.1)	2"(50)	3/4"(19.5)	0.82
EBO3410	10" (254.0)	4" (101.6)	1 1/2"(38.1)	2"(50)	3/4"(19.5)	1.02
EBO3412	12" (304.8)	6" (152.4)	1 1/2"(38.1)	2"(50)	3/4"(19.5)	1.13
EBO3414	14" (355.6)	6" (152.4)	1 1/2"(38.1)	2"(50)	3/4"(19.5)	1.25
EBO3416	16" (406.4)	6" (152.4)	1 1/2"(38.1)	2"(50)	3/4"(19.5)	1.34
EBO3418	18" (457.2)	6" (152.4)	1 1/2"(38.1)	2"(50)	3/4"(19.5)	1.45
EBO3420	20" (508)	6" (152.4)	1 1/2"(38.1)	2"(50)	3/4"(19.5)	1.5
EBO3422	22" (558.8)	6" (152.4)	1 1/2"(38.1)	2"(50)	3/4"(19.5)	1.56
EBO3424	24" (609.6)	6" (152.4)	1 1/2"(38.1)	2"(50)	3/4"(19.5)	1.63

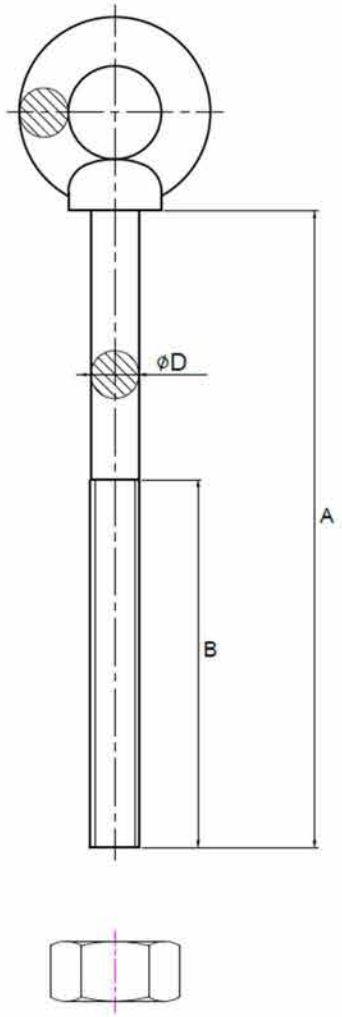
Bolts are made of carbon steel SAE 1010 to 1020, hot dip galvanized to ASTM A 153, tested according standard ANSI C-135.4.

10.1.6 Round Eye Bolts

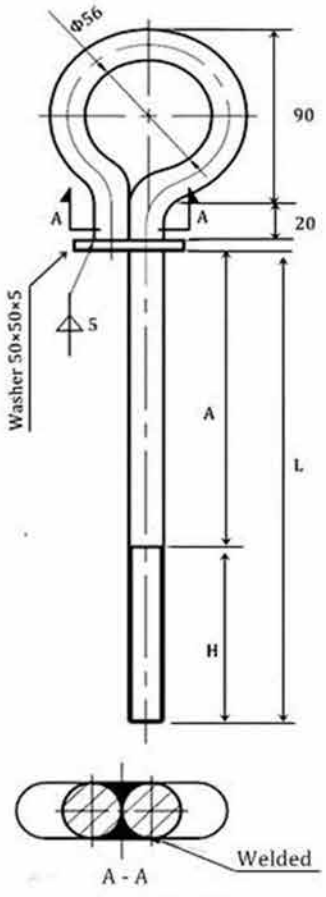
Eyebolts are produced to attach suspension hardware to poles or cross arms.



HE Code	Dimensions					Wt.
	A	B	C	E	Dia. ΦD	kg
EBR126	6" (152.4)	4" (101.6)	1 1/4"(31.8)	11/16"(17)	1/2"(12.7)	0.18
EBR128	8" (203.2)	4" (101.6)	1 1/4"(31.8)	11/16"(17)	1/2"(12.7)	0.23
EBR1210	10" (254.0)	6" (152.4)	1 1/4"(31.8)	11/16"(17)	1/2"(12.7)	0.28
EBR1212	12" (304.8)	6" (152.4)	1 1/4"(31.8)	11/16"(17)	1/2"(12.7)	0.33
EBR1214	14" (355.6)	6" (152.4)	1 1/4"(31.8)	11/16"(17)	1/2"(12.7)	0.38
EBR1216	16" (406.4)	6" (152.4)	1 1/4"(31.8)	11/16"(17)	1/2"(12.7)	0.43
EBR1218	18" (457.2)	6" (152.4)	1 1/4"(31.8)	11/16"(17)	1/2"(12.7)	0.49
EBR1220	20" (508.0)	6" (152.4)	1 1/4"(31.8)	11/16"(17)	1/2"(12.7)	0.53
EBR584	4" (101.6)	3" (76.2)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	0.22
EBR585	5" (127.0)	3" (76.2)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	0.27
EBR586	6" (152.4)	3" (76.2)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	0.31
EBR588	8" (203.2)	4" (101.6)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	0.39
EBR5810	10" (254.0)	6" (152.4)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	0.46
EBR5812	12" (304.8)	6" (152.4)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	0.56
EBR5814	14" (355.6)	6" (152.4)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	0.6
EBR5816	16" (406.4)	6" (152.4)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	0.68
EBR5818	18" (457.2)	6" (152.4)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	0.76
EBR5820	20" (508.0)	6" (152.4)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	0.85
EBR5822	22" (558.8)	6" (152.4)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	0.91
EBR5824	24" (609.6)	6" (152.4)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	1
EBR5826	26"(660.4)	8"(203.2)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	1.07
EBR5828	28"(711.2)	8"(203.2)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	1.14
EBR5830	30"(762)	8"(203.2)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	1.22
EBR5832	32"(812.8)	8"(203.2)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	1.31
EBR5834	34"(863.6)	8"(203.2)	1 5/8"(41)	13/16"(20.6)	5/8"(16)	1.39
EBR342	2" (50.8)	1 3/4" (44.5)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	0.36
EBR345	5" (127)	3" (76.2)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	0.4
EBR346	6" (152.4)	3" (76.2)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	0.48
EBR347	7" (177.8)	3" (76.2)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	0.53
EBR348	8" (203.2)	4" (101.6)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	0.58
EBR3410	10" (254.0)	6" (152.4)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	0.68
EBR3412	12" (304.8)	6" (152.4)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	0.79
EBR3414	14" (355.6)	6" (152.4)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	0.9
EBR3416	16" (406.4)	6" (152.4)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	0.99
EBR3418	18" (457.2)	6" (152.4)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	1.12
EBR3420	20" (508.0)	6" (152.4)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	1.23
EBR3422	22" (558.8)	6" (152.4)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	1.34
EBR3424	24" (609.6)	6" (152.4)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	1.46
EBR3426	26" (660.4)	6" (152.4)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	1.56
EBR3428	28" (711.2)	6" (152.4)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	1.67
EBR3430	30" (762.0)	6" (152.4)	1 7/8"(47.6)	13/16"(20.6)	3/4"(19)	1.78
EBR785	5" (127)	3" (76.2)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	0.49
EBR786	6" (152.4)	3" (76.2)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	0.57
EBR787	7" (177.8)	3" (76.2)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	0.66
EBR788	8" (203.2)	4" (101.6)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	0.74
EBR7810	10" (254.0)	4" (101.6)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	0.91
EBR7812	12" (304.8)	4" (101.6)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	1.08
EBR7814	14" (355.6)	6" (152.4)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	1.25
EBR7816	16" (406.4)	6" (152.4)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	1.4
EBR7818	18" (457.2)	6" (152.4)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	1.56
EBR7820	20" (508.0)	6" (152.4)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	1.72
EBR7822	22" (558.8)	6" (152.4)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	1.85
EBR7824	24" (609.6)	6" (152.4)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	2.05
EBR7826	26" (660.4)	8"(203.2)	2 1/8"(54)	15/16"(23.8)	7/8"(22)	2.12



HE Code	Dimensions			Wt. kg
	A	B	Dia. ΦD	
EBS124	4" (101.6)	3" (76.2)	1/2"(12.7)	0.46
EBS125	5" (127.0)	3" (76.2)	1/2"(12.7)	0.5
EBS126	6" (152.4)	4" (101.6)	1/2"(12.7)	0.54
EBS127	7" (177.8)	4" (101.6)	1/2"(12.7)	0.57
EBS128	8" (203.2)	4" (101.6)	1/2"(12.7)	0.61
EBS1210	10" (254.0)	6" (152.4)	1/2"(12.7)	0.64
EBS1212	12" (304.8)	6" (152.4)	1/2"(12.7)	0.68
EBS584	4" (101.6)	3" (76.2)	5/8"(16)	0.54
EBS586	6" (152.4)	3" (76.2)	5/8"(16)	0.76
EBS588	8" (203.2)	4" (101.6)	5/8"(16)	0.87
EBS5810	10" (254.0)	6" (152.4)	5/8"(16)	0.93
EBS5812	12" (304.8)	6" (152.4)	5/8"(16)	0.98
EBS5814	14" (355.6)	6" (152.4)	5/8"(16)	1.07
EBS5816	16" (406.4)	6" (152.4)	5/8"(16)	1.09
EBS5818	18" (457.2)	6" (152.4)	5/8"(16)	1.13
EBS5820	20" (508.0)	6" (152.4)	5/8"(16)	1.22
EBS5822	22" (558.8)	6" (152.4)	5/8"(16)	1.31
EBS5824	24" (609.6)	6" (152.4)	5/8"(16)	1.4
EBS344	4" (101.6)	3" (76.2)	3/4"(19)	0.76
EBS346	6" (152.4)	3" (76.2)	3/4"(19)	0.91
EBS348	8" (203.2)	4" (101.6)	3/4"(19)	1.11
EBS3410	10" (254.0)	6" (152.4)	3/4"(19)	1.22
EBS3412	12" (304.8)	6" (152.4)	3/4"(19)	1.33
EBS3414	14" (355.6)	6" (152.4)	3/4"(19)	1.45
EBS3416	16" (406.4)	6" (152.4)	3/4"(19)	1.54
EBS3418	18" (457.2)	6" (152.4)	3/4"(19)	1.63
EBS3420	20" (508.0)	6" (152.4)	3/4"(19)	1.7
EBS3422	22" (558.8)	6" (152.4)	3/4"(19)	1.8
EBS3424	24" (609.6)	6" (152.4)	3/4"(19)	1.91
EBS3426	26" (660.4)	6" (152.4)	3/4"(19)	2.01
EBS3428	28" (711.2)	6" (152.4)	3/4"(19)	2.13
EBS7810	10" (254.0)	4" (101.6)	7/8"(22)	1.37
EBS7812	12" (304.8)	4" (101.6)	7/8"(22)	1.55
EBS7814	14" (355.6)	6" (152.4)	7/8"(22)	1.72
EBS7816	16" (406.4)	6" (152.4)	7/8"(22)	1.89
EBS7818	18" (457.2)	6" (152.4)	7/8"(22)	2.06
EBS7820	20" (508.0)	6" (152.4)	7/8"(22)	2.24
EBS7822	22" (558.8)	6" (152.4)	7/8"(22)	2.41
EBS7824	24" (609.6)	6" (152.4)	7/8"(22)	2.59
EBS7826	26" (660.4)	8"(203.2)	7/8"(22)	2.76
EBS7828	28" (711.2)	8"(203.2)	7/8"(22)	2.93
EBS7830	30"(762)	8"(203.2)	7/8"(22)	3.11
EBS7832	32"(812.8)	8"(203.2)	7/8"(22)	3.28
EBS7834	34"(863.6)	8"(203.2)	7/8"(22)	3.45
EBS7836	36"(914.4)	8"(203.2)	7/8"(22)	3.63



HE Code	Dimensions				Hex Nut(s)
	Dia.	A	H	L	
EBW587	5/8″	0	7	7	1
EBW588	5/8″	0	8	8	1
EBW589	5/8″	1	8	9	1
EBW5810	5/8″	2	8	10	1
EBW5811	5/8″	3	8	11	1
EBW5812	5/8″	2	10	12	1
EBW5814	5/8″	4	10	14	1
EBW5815	5/8″	3	12	15	1
EBW5817	5/8″	3	14	17	3
EBW349	3/4″	5	4	9	1
EBW3410	3/4″	6	4	10	1
EBW3411	3/4″	7	4	11	1
EBW3412	3/4″	8	4	12	1
EBW3415	3/4″	11	4	15	1
EBW3417	3/4″	13	4	17	3

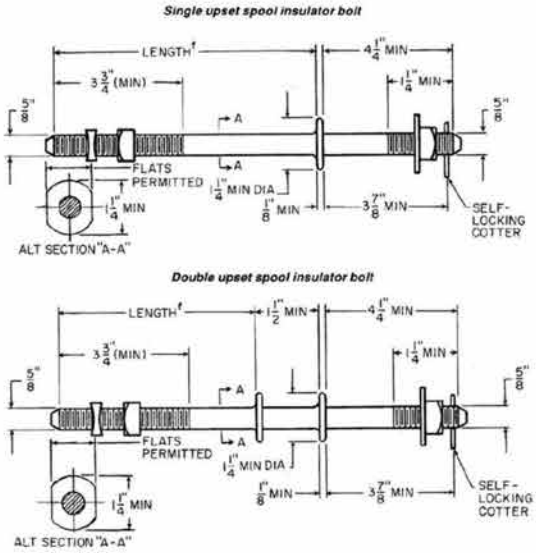
Forged Eyebolts are made of one-piece high quality carbon steel, hot dip galvanized in accordance with ASTM A153.

10.1.7 Spool Bolts

Spool bolts are produced to provide extra clearance between insulators and poles, also used with spool insulators in rural secondary construction.

Each bolt is assembled with 2 square nuts, MF type locknut, round washer and cotter pin.

There are usually have 2 types of spool bolts: single spool bolts and double spool bolts.

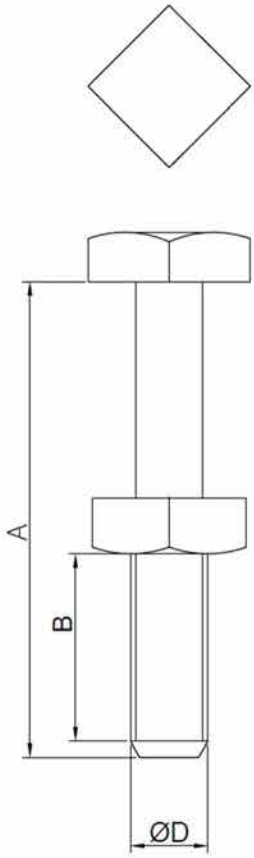


HE Code	Dimensions				Type	Wt. kg
	Overall length	Shank length	Thread length	Bolt Dia.		
SBS588	12 3/4"	8"	4"	5/8"	Single	0.626
SBS589	13 3/4"	9"	4"	5/8"	Single	0.653
SBS5810	14 1/2"	10"	4"	5/8"	Single	0.757
SBS5812	16 1/2"	12"	6"	5/8"	Single	0.821
SBS5814	18 3/4"	14"	6"	5/8"	Single	0.889
SBD588	14"	8"	4"	5/8"	Double	0.753
SBD589	15"	9"	4"	5/8"	Double	0.735
SBD5810	16"	10"	4"	5/8"	Double	0.862
SBD5812	18"	12"	6"	5/8"	Double	0.898
SBD5814	20"	14"	6"	5/8"	Double	0.925

Bolts are produced in forged carbon steel SAE 1045, hot dip galvanized to ASTM A-153, tested according to Standard ANSI C-135.31.

10.1.8 Square Head Bolts

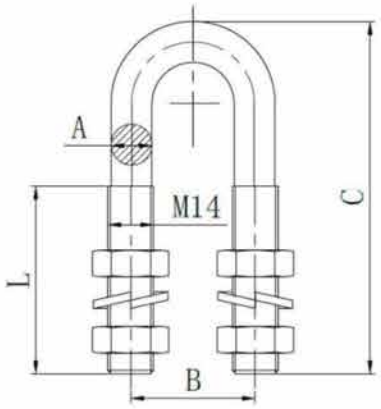
Square bolts are generally used to attach crossarms, also called crossarm bolts or through bolts.



HE Code	Dimensions			Wt./1000
	A	B	Dia. ΦD	kgs
SB382	2" (50.8)	1 3/4" (44.5)	3/8"(9.5)	32.6
SB383	3" (76.2)	2 3/4" (69.8)	3/8"(9.5)	46.7
SB384	4" (101.6)	3" (76.2)	3/8"(9.5)	68.04
SB38412	4 1/2" (114.3)	3" (76.2)	3/8"(9.5)	78.02
SB385	5" (127)	3" (76.2)	3/8"(9.5)	85.27
SB38512	5 1/2" (139.7	3" (76.2)	3/8"(9.5)	88.9
SB386	6" (152.4)	3" (76.2)	3/8"(9.5)	97.98
SB387	7" (177.8)	4" (101.6)	3/8"(9.5)	99.79
SB388	8" (203.2)	4" (101.6)	3/8"(9.5)	115
SB12112	1 1/2" (38)	1"(25)	1/2"(12.7)	79.83
SB122	2" (50.8)	1 3/4" (44.5)	1/2"(12.7)	90.72
SB12212	2 1/2"(63.5)	2 1/4"(57.1)	1/2"(12.7)	99.79
SB123	3" (76.2)	2 3/4" (69.8)	1/2"(12.7)	113.4
SB124	4" (101.6)	3" (76.2)	1/2"(12.7)	131.54
SB12412	4 1/2" (114.3)	3" (76.2)	1/2"(12.7)	149.68
SB125	5" (127.0)	3" (76.2)	1/2"(12.7)	158.76
SB12512	5 1/2" (139.7	3" (76.2)	1/2"(12.7)	170.1
SB126	6" (152.4)	3" (76.2)	1/2"(12.7)	176.9
SB127	7" (177.8)	4" (101.6)	1/2"(12.7)	217.72
SB128	8" (203.2)	4" (101.6)	1/2"(12.7)	222.26
SB129	9" (228.6)	4" (101.6)	1/2"(12.7)	258.55
SB1210	10" (254.0)	6" (152.4)	1/2"(12.7)	272.15
SB1212	12" (304.8)	6" (152.4)	1/2"(12.7)	322.05
SB1214	14" (355.6)	6" (152.4)	1/2"(12.7)	331.12
SB1216	16" (406.4)	6" (152.4)	1/2"(12.7)	371.94
SB582	2" (50.8)	1 3/4" (44.5)	5/8"(16)	154.22
SB583	3" (76.2)	2 3/4" (69.8)	5/8"(16)	143
SB584	4" (101.6)	3" (76.2)	5/8"(16)	182
SB585	5" (127.0)	3" (76.2)	5/8"(16)	272.15
SB586	6" (152.4)	3" (76.2)	5/8"(16)	312.98
SB587	7" (177.8)	4" (101.6)	5/8"(16)	340.19
SB588	8" (203.2)	4" (101.6)	5/8"(16)	353.8
SB589	9" (228.6)	4" (101.6)	5/8"(16)	381.02
SB5810	10" (254.0)	6" (152.4)	5/8"(16)	449.05
SB5812	12" (304.8)	6" (152.4)	5/8"(16)	508.02
SB5814	14" (355.6)	6" (152.4)	5/8"(16)	571.52
SB5816	16" (406.4)	6" (152.4)	5/8"(16)	607.81
SB5818	18" (457.2)	6" (152.4)	5/8"(16)	675.85
SB5820	20" (508.0)	6" (152.4)	5/8"(16)	743.89
SB5822	22" (558.8)	6" (152.4)	5/8"(16)	798.32
SB5824	24" (609.6)	6" (152.4)	5/8"(16)	879.96
SB342	2" (50.8)	1 3/4" (44.5)	3/4"(19)	159
SB346	6" (152.4)	3" (76.2)	3/4"(19)	385
SB347	7" (177.8)	4" (101.6)	3/4"(19)	440
SB348	8" (203.2)	4" (101.6)	3/4"(19)	571.52
SB349	9" (228.6)	4" (101.6)	3/4"(19)	554
SB3410	10" (254.0)	6" (152.4)	3/4"(19)	698.53
SB3412	12" (304.8)	6" (152.4)	3/4"(19)	752.96
SB3414	14" (355.6)	6" (152.4)	3/4"(19)	852.75
SB3416	16" (406.4)	6" (152.4)	3/4"(19)	1020.58
SB3418	18" (457.2)	6" (152.4)	3/4"(19)	1052.33
SB3420	20" (508.0)	6" (152.4)	3/4"(19)	1143.05
SB3422	22" (558.8)	6" (152.4)	3/4"(19)	1215.62
SB3424	24" (609.6)	6" (152.4)	3/4"(19)	1378.91
SB3426	26" (660.4)	6" (152.4)	3/4"(19)	1397.06
SB3428	28" (711.2)	6" (152.4)	3/4"(19)	1450
SB3430	30" (762.0)	6" (152.4)	3/4"(19)	1520
SB7812	12" (304.8)	6" (152.4)	7/8"(22)	998
SB7814	14" (355.6)	6" (152.4)	7/8"(22)	1288.2
SB7816	16" (406.4)	6" (152.4)	7/8"(22)	1433.34
SB7818	18" (457.2)	6" (152.4)	7/8"(22)	1596.64
SB7820	20" (508.0)	6" (152.4)	7/8"(22)	1769
SB7822	22" (558.8)	6" (152.4)	7/8"(22)	1927.76
SB7824	24" (609.6)	6" (152.4)	7/8"(22)	2050.23

10.1.9 U Bolts

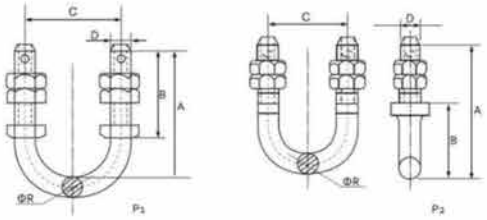
U bolts are produced usually on steel angle H-frame cross ties, and to attach insulator strings to suspension and tension towers.



U Bolts

HE Code	Dimensions(in)				Wt.	Ultimate strength
	A	B	C	L	kg	lbs
UB12112	1/2"	1 1/2"	4 1/4"	1 1/2"	0.526	16000
UB12134	1/2"	1 1/2"	4 1/4"	1 3/4"	0.526	16000

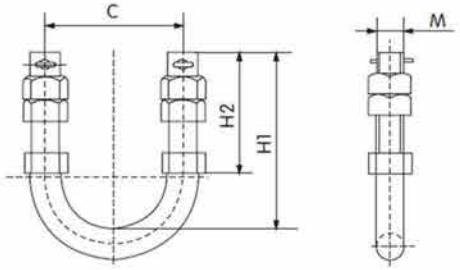
Material: carbon steel
Finish: hot dip galvanized



U Bolts

HE Code	Dimensions(mm)					P	Wt.(kg)	Tensile strength(KN)
	A	B	C	D	ΦR			
UB12-80	80	45	40	12	12	P1	0.38	35
UB14-90	90	60	40	14	14	P1	0.42	35
UB14-120	120	70	70	14	14	P1	0.46	40
UB16-130	130	65	70	16	16	P1	0.66	50
UB18-130	130	80	70	18	18	P1	0.86	60
UB18-130-1	130	60	80	18	18	P1	0.88	60
UB18-140	140	60	90	18	18	P1	0.9	60
UB20-130	130	90	70	20	20	P1	1.2	70
UB20-140	140	70	80	20	20	P1	1.7	70
UB20-150	150	90	90	20	20	P1	1.28	70
UB22-150	150	90	80	22	22	P1	1.3	100
UB22-160	160	100	90	22	22	P1	1.34	100
UB18-130-2	130	39	80	18	18	P2	0.88	60
UB20-140-1	140	43	80	20	20	P2	1.08	70
UB22-150-1	150	45	80	22	22	P2	1.28	100

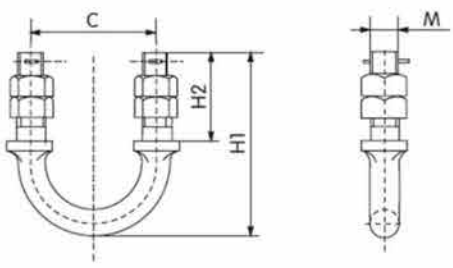
Material: carbon steel
Finish: hot dip galvanized



U Bolts

HE Code	Dimensions(mm)				Specified failure load(kN)			Weight (kg)
	C	M	H1	H2	X	Y	Z	
UB-1670	70	16	110	75	18	3.5	35	0.54
UB-1680	80	16	110	75	18	3.5	35	0.6
UB-1880	80	18	110	75	18	3.5	35	0.83
UB-2080	80	20	120	80	24	4.9	47	1.08
UB-2280	80	22	130	90	28	6.5	57	1.3

The cotter pins are stainless. the other parts are are Hot-dip galvanized steel.



U-Bolts (enhanced type)

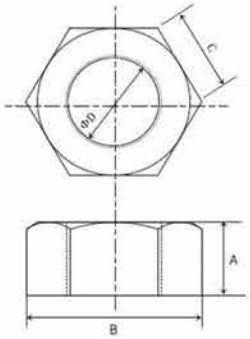
HE Code	Dimensions(mm)				Specified failure load(kN)			Weight (kg)
	C	M	H1	H2	X	Y	Z	
UBJ-1880	80	18	105	50	18	5.3	35	0.85
UBJ-2080	80	20	120	60	24	7.4	47	1.1
UBJ-2280	80	22	127	65	28	10.8	57	1.4

The cotter pins are stainless. the other parts are are Hot-dip galvanized steel.

10.2 Nuts

10.2.1 Hex Nuts

Hex nuts are produced to provide tight connections.

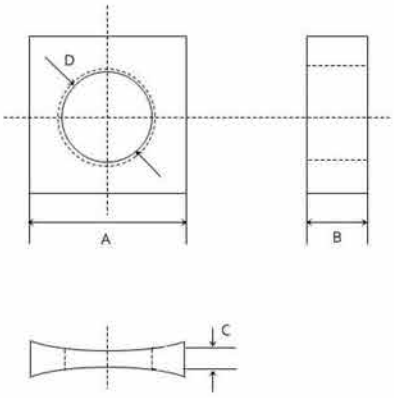


HE Code	Bolt Dia.	Dimensions(in)				Wt./1000
		ΦD	A	B	C	kg
HN14	1/4"	1/4"	7/32"	1/2 "	7/16"	3.33
HN38	3/8"	3/8"	21/64"	5/8"	5/8"	9.07
HN12	1/2"	1/2"	7/16"	7/8"	13/16"	18.14
HN58	5/8"	5/8"	35/64"	1"	1"	40.82
HN34	3/4"	3/4"	21/32"	1 1/4"	1 1/8"	45.36
HN78	7/8"	7/8"	49/64"	1 1/2"	1 5/16"	90.72
HN1	1"	1"	7/8"	1 5/8"	1 1/2"	122.47
HN114	1 1/4"	1 1/4"	1 3/32"	2 1/8"	1 7/8"	249.47

Material: carbon steel
Finish: hot dip galvanized

10.2.2 Lock Nuts

MFN curved lock nuts are produced to lock down regular nuts securely and provide tight connections.
MFN curved lock nuts, working kind like free spinning lock nuts, can be wrenched with fingers or wrenches.

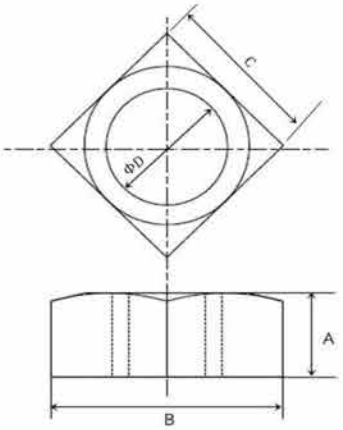


HE Code	Dimensions				Wt./1000
	D	A	B	C	kg
MFN38	3/8"	5/8"	1/4"	3/16"	5.67
MFN12	1/2"	13/16"	19/64"	3/16"	11.79
MFN58	5/8"	1"	3/8"	3/16"	20.14
MFN34	3/4"	1 1/8"	7/16"	3/16"	27.22
MFN78	7/8"	1 5/16"	15/32"	3/16"	38.56
MFN1	1"	1 1/2"	15/32"	3/16"	53.07

MF nuts are vibration proof and hot dip galvanized per ASTM A153.

10.2.3 Square Nuts

Square nuts are produced to use on a variety of bolt and stud hardware.

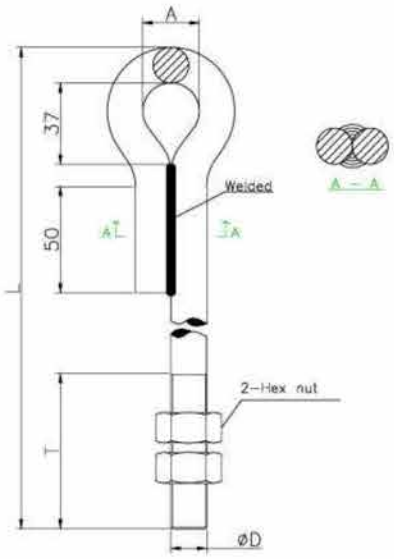


HE Code	Dimensions				Wt./1000
	ΦD	A	B	C	kg
SN14	1/4"	7/32"	1/2"	7/16"	8
SN38	3/8"	21/64"	7/8"	5/8"	11.79
SN12	1/2"	7/16"	1 1/8"	13/16"	36.29
SN58	5/8"	35/64"	1 3/8"	1"	47.17
SN34	3/4"	21/32"	1 1/2"	1 1/8"	65.32
SN78	7/8"	49/64"	1 3/4"	1 5/16"	136.08
SN1	1"	7/8"	2"	1 1/2"	226.8

Square nuts are compatible with all ANSI C135.1 hardware.
Nuts are tapped oversize in accordance with ASTM A563 for proper fit on galvanized bolts.

10.3 Rods

10.3.1 Anchor Rods



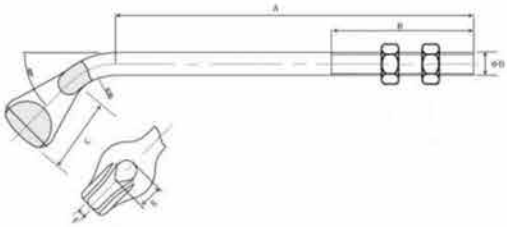
Welded anchor rods are partial threads, assembled with two nuts.
Normally they are installed with earthing plate in the earth
Anchor rods are designed to anchor the guy wire to the ground.

HE Code	Dimensions		Min tensile strength
	L	D	KN
HETR-1618	1800	5/8" (16)	60
HETR-1620	2000	5/8" (16)	60
HETR-1624	2400	5/8" (16)	60
HETR-1630	3000	5/8" (16)	60
HETR-1918	1800	3/4" (19)	93
HETR-1920	2000	3/4" (19)	93
HETR-1924	2400	3/4" (19)	93
HETR-1930	3000	3/4" (19)	93

Material: carbon steel
Finish: hot dip galvanized

10.3.2 Angle Anchor Rods

Angle anchor rods are free from using thimbles, links, shackles, guy hooks and strain plates.
Rods are bent at 45° angle.
Rods are assembled with one square nut or hex nut.



HE Code	Dimensions						Wt.
	A	B	C	E	F	ΦD	kg
ARA586	6"	4"	3"	11/16"	9/16"	5/8"	0.59
ARA587	7"	4"	3"	11/16"	9/16"	5/8"	0.62
ARA588	8"	4"	3"	11/16"	9/16"	5/8"	0.66
ARA5810	10"	4"	3"	11/16"	9/16"	5/8"	0.74
ARA5812	12"	6"	3"	11/16"	9/16"	5/8"	0.81
ARA5814	14"	6"	3"	11/16"	9/16"	5/8"	0.88
ARA5816	16"	6"	3"	11/16"	9/16"	5/8"	0.95
ARA5818	18"	6"	3"	11/16"	9/16"	5/8"	1
ARA3410	10"	6"	3 9/16"	13/16"	11/16"	3/4"	0.85
ARA3412	12"	6"	3 9/16"	13/16"	11/16"	3/4"	0.94
ARA3414	14"	6"	3 9/16"	13/16"	11/16"	3/4"	1.03
ARA3416	16"	6"	3 9/16"	13/16"	11/16"	3/4"	1.2
ARA3418	18"	6"	3 9/16"	13/16"	11/16"	3/4"	1.31

Rods are made of carbon steel SAE 1010 to 1020, hot dip galvanized according to ASTM-A153.

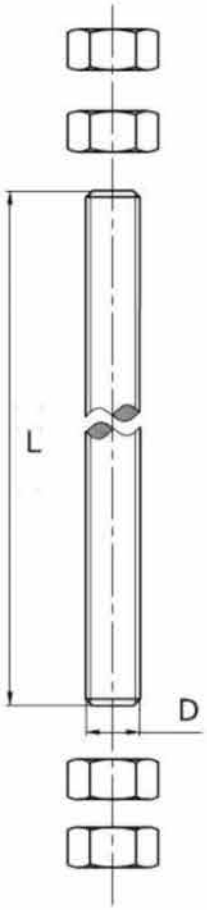
10.3.3 Full Threaded Rods

Threaded rods, also called double arming bolts, are produced for pole mounting on wood poles or cross arms.

Standard double arming bolts are full threaded, assembled with four square or hex nuts.

While attaching cross arms together, two nuts at each end can maintain correct spacing.

Cone points at each bolt end are designed for easily driving bolts without damaging their threads.

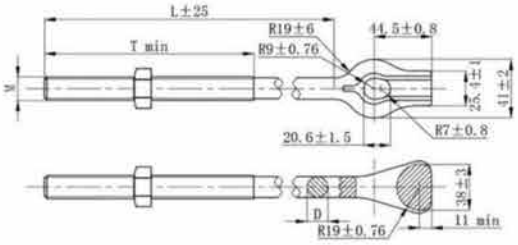


Threaded rods are constructed of high quality carbon steel SAE 1010 to 1020, hot dip galvanized per ASTM A153 for corrosion resistance.

HE Code	Dimensions		Min tensile strength	Wt.
	L	D	lbs	kg
DAB1212	12" (305)	1/2"(13)	7800	0.34
DAB1214	14" (356)	1/2"(13)	7800	0.381
DAB1216	16" (406)	1/2"(13)	7800	0.426
DAB1220	20" (508)	1/2"(13)	7800	0.508
DAB1222	22" (559)	1/2"(13)	7800	0.549
DAB1224	24" (610)	1/2"(13)	7800	0.59
DAB5810	10" (254)	5/8" (16)	12400	0.544
DAB5812	12" (305)	5/8" (16)	12400	0.599
DAB5814	14" (356)	5/8" (16)	12400	0.653
DAB5816	16" (406)	5/8" (16)	12400	0.744
DAB5818	18" (457)	5/8" (16)	12400	0.816
DAB5820	20" (508)	5/8" (16)	12400	0.871
DAB5822	22" (559)	5/8" (16)	12400	0.962
DAB5824	24" (610)	5/8" (16)	12400	1.016
DAB5826	26" (660)	5/8" (16)	12400	1.089
DAB5828	28" (711)	5/8" (16)	12400	1.161
DAB5830	30" (762)	5/8" (16)	12400	1.343
DAB3412	12" (305)	3/4" (19)	18350	0.889
DAB3414	14" (356)	3/4" (19)	18350	0.998
DAB3416	16" (406)	3/4" (19)	18350	1.089
DAB3418	18" (457)	3/4" (19)	18350	1.179
DAB3420	20" (508)	3/4" (19)	18350	1.288
DAB3422	22" (559)	3/4" (19)	18350	1.379
DAB3424	24" (610)	3/4" (19)	18350	1.524
DAB3426	26" (660)	3/4" (19)	18350	1.565
DAB3428	28" (711)	3/4" (19)	18350	1.656
DAB3430	30" (762)	3/4" (19)	18350	1.751
DAB3432	32"(812)	3/4" (19)	18350	1.755
DAB3434	34"(863)	3/4" (19)	18350	1.851
DAB3436	36"(914)	3/4" (19)	18350	1.946
DAB3438	38"(965)	3/4" (19)	18350	2.037
DAB3440	40"(1016)	3/4" (19)	18350	2.132
DAB3442	42"(1066)	3/4" (19)	18350	2.227
DAB7812	12" (305)	7/8"(22)	25400	1.188
DAB7814	14" (356)	7/8"(22)	25400	1.32
DAB7816	16" (406)	7/8"(22)	25400	1.451
DAB7818	18" (457)	7/8"(22)	25400	1.583
DAB7820	20" (508)	7/8"(22)	25400	1.715
DAB7822	22" (559)	7/8"(22)	25400	1.842
DAB7824	24" (610)	7/8"(22)	25400	1.973
DAB7826	26" (660)	7/8"(22)	25400	2.105
DAB7828	28" (711)	7/8"(22)	25400	2.236
DAB7830	30" (762)	7/8"(22)	25400	2.368
DAB7832	32"(812)	7/8"(22)	25400	2.499
DAB7834	34"(863)	7/8"(22)	25400	2.631
DAB7836	36"(914)	7/8"(22)	25400	2.762
DAB7838	38"(965)	7/8"(22)	25400	2.894
DAB7840	40"(1016)	7/8"(22)	25400	3.025
DAB7842	42"(1066)	7/8"(22)	25400	3.157
DAB112	12" (305)	1"(25.4)	33500	1.615
DAB114	14" (356)	1"(25.4)	33500	1.778
DAB116	16" (406)	1"(25.4)	33500	1.955
DAB118	18" (457)	1"(25.4)	33500	2.123
DAB120	20" (508)	1"(25.4)	33500	2.295
DAB122	22" (559)	1"(25.4)	33500	2.468
DAB124	24" (610)	1"(25.4)	33500	2.635
DAB126	26" (660)	1"(25.4)	33500	2.808
DAB128	28" (711)	1"(25.4)	33500	2.976
DAB130	30" (762)	1"(25.4)	33500	3.148
DAB132	32"(812)	1"(25.4)	33500	3.32
DAB134	34"(863)	1"(25.4)	33500	3.488
DAB136	36"(914)	1"(25.4)	33500	3.66
DAB138	38"(965)	1"(25.4)	33500	3.828
DAB140	40"(1016)	1"(25.4)	33500	4.001
DAB142	42"(1066)	1"(25.4)	33500	4.173
DAB11412	12" (305)	1 1/4"(31.75)	53300	2.123
DAB11414	14" (356)	1 1/4"(31.75)	53300	2.44
DAB11416	16" (406)	1 1/4"(31.75)	53300	2.753
DAB11418	18" (457)	1 1/4"(31.75)	53300	3.071
DAB11420	20" (508)	1 1/4"(31.75)	53300	3.388
DAB11422	22" (559)	1 1/4"(31.75)	53300	3.706
DAB11424	24" (610)	1 1/4"(31.75)	53300	4.023
DAB11426	26" (660)	1 1/4"(31.75)	53300	4.336
DAB11428	28" (711)	1 1/4"(31.75)	53300	4.654
DAB11430	30" (762)	1 1/4"(31.75)	53300	4.971
DAB11432	32"(812)	1 1/4"(31.75)	53300	5.289
DAB11434	34"(863)	1 1/4"(31.75)	53300	5.606
DAB11436	36"(914)	1 1/4"(31.75)	53300	5.919
DAB11438	38"(965)	1 1/4"(31.75)	53300	6.237
DAB11440	40"(1016)	1 1/4"(31.75)	53300	6.554
DAB11442	42"(1066)	1 1/4"(31.75)	53300	6.872

10.3.4 Thimbleye Anchor Rods

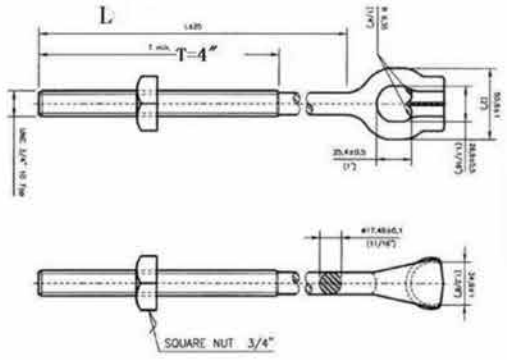
Anchor rods, also named thimbleye bolts, are produced for attaching guys to poles and cross arms in overhead networks and high voltage, for dead-ending and for down guying.
Rods are assembled with 1 heavy hex nut or square nut.
Rods can be supplied in straight forms or 45-degree angle forms.
Rods can be supplied in single thimble or double thimbles.



HE Code	Size	Dimensions(mm)			
		M	D	L	T
ART58-1500	5/8×1500	5/8″	14.2±0.3	1500	102
ART58-1800	5/8×1800	5/8″	14.2±0.3	1800	102
ART58-2400	5/8×2400	5/8″	14.2±0.3	2400	102

Rods are made of carbon steel SAE 1010 to 1020, hot dip galvanized according to ASTM-A153.

10.3.5 Twineye Anchor Rods



HE Code	Dimensions	
	L	T
ARD34-72	72″	4″
ARD34-84	84″	4″
ARD34-96	96″	4″
ARD34-108	108″	4″
ARD34-120	120″	4″

Material: carbon steel
Finish: hot dip galvanized

10.4 Screws

10.4.1 Eye Screws

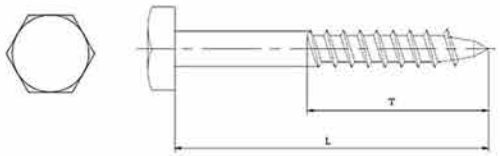
Eye screws are gimlet-point lag-screw threaded.

HE Code	Dimensions			Wt.
	Dia.	Eye size.	Length under eyes	kg
ES38	3/8"	7/8"×1 1/4"	3"	0.1
ES12	1/2"	1 1/4×1 5/8"	6"	0.295
ES58	5/8"	1 1/2"×2"	6 3/4"	0.472
ES34	3/4"	1 1/2"×2"	6 3/4"	0.617

Eyes are solid drop forged.
Steel are hot dipped galvanized.

10.4.2 Lag Screws

Lag screws have rolled threads and can be wrenched in or driven in. For maximum holding strength, gimlet point lag screws should be installed with a wrench.



Material steel is hot dipped galvanized to ASTM A153.

HE Code	Size	L	WT(kg/M)
HELS-1235	M12	35	36.2
HELS-1236	M12	40	39.2
HELS-1237	M12	45	42.1
HELS-1238	M12	50	45.4
HELS-1239	M12	55	48.6
HELS-1240	M12	60	51.8
HELS-1241	M12	65	54.7
HELS-1242	M12	70	57.8
HELS-1243	M12	75	61
HELS-1244	M12	80	64.5
HELS-1245	M12	90	71
HELS-1246	M12	100	77.1
HELS-1247	M12	110	83.4
HELS-1248	M12	120	89.5
HELS-1650	M16	50	84.1
HELS-1651	M16	55	89.7
HELS-1652	M16	60	94.9
HELS-1653	M16	65	99.5
HELS-1654	M16	70	107
HELS-1655	M16	75	112
HELS-1656	M16	80	118
HELS-1657	M16	90	130
HELS-1658	M16	100	141
HELS-1659	M16	110	152
HELS-1660	M16	120	163
HELS-2060	M20	60	165
HELS-2061	M20	65	174
HELS-2062	M20	70	182
HELS-2063	M20	75	192
HELS-2064	M20	80	201
HELS-2065	M20	90	220
HELS-2066	M20	100	238
HELS-2067	M20	110	253
HELS-2068	M20	120	275

10.5 Washers

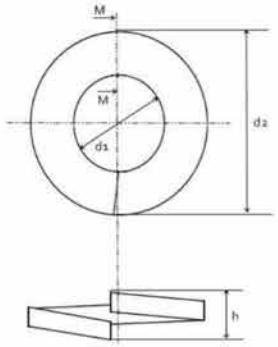
10.5.1 Flat Round Washers

HE Code	Bolt dia.	Dimensions(in)			Wt./1000
		ΦA	ΦB	C	kg
FW38	3/8″	7/16″	1″	3/32″	7.44
FW12	1/2″	9/16″	1 3/8″	7/64″	20.41
FW58	5/8″	11/16″	1 3/4″	9/64″	38.56
FW34	3/4″	13/16″	2″	5/32″	53.52
FW78	7/8″	15/16″	2″	1/4″	95.25
FW1	1″	1 1/16″	3″	1/4″	190.51

Material: carbon steel
Finish: hot dip galvanized

10.5.2 Split Lock Washers

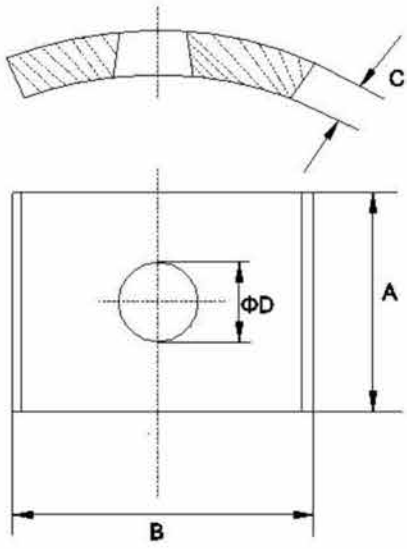
Split lock washers are produced to prevent a bolt or a screw from turning or spinning due to vibration.



HE Code	Dimensions				Wt./1000
	Bolts dia.	d1(mm)	d2(mm)	h(mm)	kg
SLW38	3/8″	10.3	17.3	2.9	3.63
SLW12	1/2″	14	22.23	3.56	7.26
SLW58	5/8″	17.3	27.9	4	12.25
SLW34	3/4″	19.13	32.13	4.78	20.87
SLW78	7/8″	22.3	37.06	5.56	28.58

Material steel is hot dipped galvanized to ASTM A153.

10.5.3 Square Curved Washers



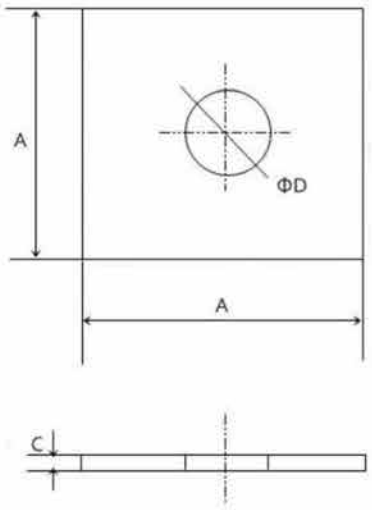
Washers provide a broader bearing surface and increase the compression grip of the tightened nut.
Square curved washers are curved edge-to-edge.

HE Code	Dimensions				Bolt Dia.	Wt./1000 kg
	A	B	C	ΦD		
SWC58-2	2″	2″	3/16″	11/16″	5/8″	113.4
SWC58-214	2 1/4″	2 1/4″	3/16″	11/16″	5/8″	140.61
SWC58-212	2 1/2″	2 1/2″	3/16″	11/16″	5/8″	163.29
SWC58-3	3″	3″	1/4″	11/16″	5/8″	281.23
SWC34-3	3″	3″	1/4″	13/16″	3/4″	299.37
SWC34-3-1	3″	3″	1/4″	7/8″	3/4″	281.23
SWC34-314	3 1/4″	3 1/4″	1/4″	13/16″	3/4″	344.73
SWC34-4	4″	4″	3/16″	13/16″	3/4″	371.94
SWC78-4	4″	4″	1/4″	15/16″	7/8″	544.31
SWC1-312	3 1/2″	3 1/2″	3/8″	1 1/8″	1″	272.15

Square curved washers are steel hot dip galvanized to ASTM A153.

10.5.4 Square Washers

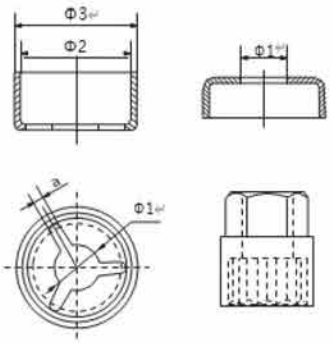
Square washers are produced for use on poles and crossarms to distribute the stress.
They prevent the crushing of wood fibers and protect the drilled holes. Square washers also provide alignment checking.
They are installed under bolts, nuts or rods to provide a broader bearing surface and increase the compression grip of the tightened nuts.



HE Code	Dimensions(in)				Wt./1000
	A	C	ΦD	Bolt dia.	kg
SW122	2"	1/8"	9/16"	1/2"	58.97
SW582	2"	1/8"	11/16"	5/8"	54.43
SW5821	2"	3/16"	11/16"	5/8"	95.25
SW58214	2 1/4"	3/16"	11/16"	5/8"	108.86
SW34214	2 1/4"	3/16"	13/16"	3/4"	104.33
SW343	3"	1/4"	11/16"	3/4"	136.08
SW3431	3"	3/16"	13/16"	3/4"	231.33
SW3432	3"	1/4"	13/16"	3/4"	290.3
SW3433	3"	1/4"	7/8"	3/4"	299.37
SW344	4"	3/16"	13/16"	3/4"	394.62
SW3441	4"	1/2"	13/16"	3/4"	1070.47
SW3442	4"	1/4"	7/8"	3/4"	544.31
SW784	4"	1/4"	15/16"	7/8"	535.24
SW14	4"	1/2"	1 1/8"	1"	1034.19

Square washers are produced in carbon steel SAE 1010 to 1020, hot dip galvanized to ASTM A-153.

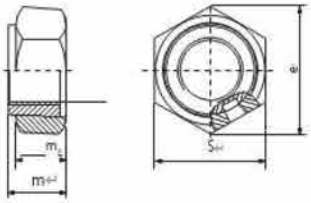
10.6 Security hat/Security nut/Special tool



1, Security hat

HE Code	Disposing cord grip	Supporting tool	Dimensions(mm)				Weight (kg)
			Φ1	Φ2	Φ3	a	
HFHS-1	NUT-1(M16)	1	18	38	42	4	0.093
HFHS-2	NUT-2(M18)	2	20	40	44	4	0.113
HFHS-3	NUT-3(M22)	3	24	45	50	4	0.144
HFHS-4	NUT-4(M24)	4	26	50	55	4	0.155

Hot-dip galvanized steel.



2, Security nut

Specification		M12	M16	M18	M20	M22	M24	M30
P (Pitch)		1.75	2	2.5	2.5	2.5	3	3.5
e		22.78	26.17	29.56	32.95	36.95	39.55	
m	Max	11.2	13.9	15.9	17.5	18.2	21.3	24.4
	min	9.4	12.7	13.5	15.7	16.1	18.2	21.3
mw	min	8.5	11.3	12.1	13.5	15.55	15.5	17.4
S		21	24	27	30	32	36	46

Hot-dip galvanized steel.

Fuse Cutout

11.1 Fuse Cutout

Drop-out fuse is the most commonly used short-circuit protection switch for distribution lines.
The drop-out fuse is installed on the branch line, which can reduce the scope of power failure.
Because it has an obvious disconnection point, it has the function of an isolation switch,which creates a safe working environment for the lines and equipment in the maintenance section.
Installed on the distribution transformer, it can be used as the main protection of the distribution transformer.
It has the characteristics of economy, easy operation and strong adaptability to outdoor environment.

TYPE 1

TYPE 2

TYPE 3

HE Code	Rated Voltage (KV)	Rated Current (A)	Breaking Current(A)	Impulse Voltage (BIL)	Power Frequency withstand voltage(KV)	Leakage distance (MM)	Weight (KG)	Dimensions (CM)
HERW1010	10	100(200)	6300	110	42	260	7.5	48x32x27
HERW1020	10	100(200)	8000	110	42	260	7.5	48x32x27
HERW1210	12	100	6300	110	40	250	6.5	40x36x11.5
HERW1220	12	200	12500	110	40	250	6.5	40x36x11.5
HERW2410	24	100	6300	150	70	750	12	58×38.5×14.5
HERW2420	24	200	12500	150	70	750	12	58×38.5×14.5
HERW3610	33	100	10000	170	95	1000	14	70.5×39.5×14.5
HERW3620	33	200	12500	170	95	1000	14	70.5×39.5×14.5

11.2 Fuse link

Our fuse link is divided into “K” and “T” type, it has general type, universal type and screw type available according to IECV-282 standard. The product is made of “K” type fuse link with 6-8 melting speed, and “T” type with 10-13 melting speed, these two types of fuse link are popularized by national resource department and are widely applied to drop-off type fuse of 11-36 KV grade.

Features:
Rated current :1A-300A
Rated Voltage :11KV-27KV (Length :530MM-600MM) Rated Voltage :33KV-38KV (Length :787MM) Standard: IECV-282
High breaking capacity
High mechanical strength

Application: Drop-off type fuse of 11-36KV grade

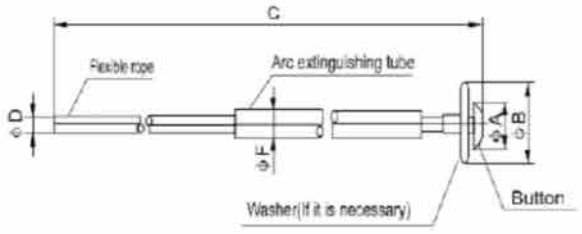
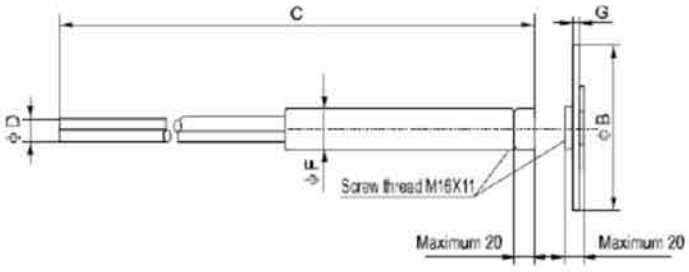


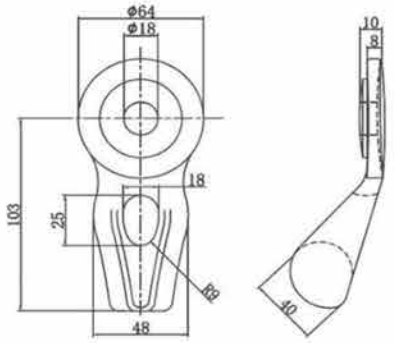
Fig.b.1a button type



HE Code	Rated Current, A	A(mm)	B(mm)	C(mm)	D(mm)	F(mm)
HEFL-1	1.0A	12.5±0.2	19±0.2	Note 1	2.0	8.0
HEFL-2	2.0A					
HEFL-3	3.0A					
HEFL-4	4.0A					
HEFL-5	5.0A					
HEFL-6	6.0A					
HEFL-8	8.0A					
HEFL-10	10A					
HEFL-12	12A					
HEFL-15	15A					
HEFL-20	20A					
HEFL-30	30A				3.0	8.0
HEFL-40	40A					
HEFL-45	45A	19±0.2	NA		5.0	10.0
HEFL-50	50A					
HEFL-55	55A					
HEFL-60	60A					
HEFL-65	65A					
HEFL-70	70A					
HEFL-75	75A					
HEFL-100	100A				7.0	10.0
HEFL-105	105A					
HEFL-110	110A					
HEFL-115	115A					
HEFL-120	120A					
HEFL-140	140A				7.0	12.0
HEFL-150	160A					
HEFL-180	180A					
HEFL-200	200A					

Guy Attachments

12.1 Guy Angle Thimble heavy type

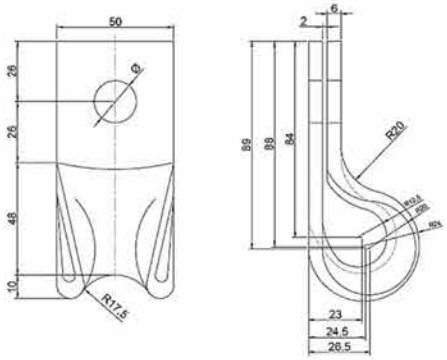


Angle eyelets are used for down guy attachments. It assembles upper end of guy on ground before raising it to the pole top.
All edges are slightly rounded.

HE Code	Wt. kg
ELA18	0.431

Raw material: carbon steel SAE 1020, ductile iron
Finish: hot dip galvanized

12.2 Guy Angle Thimble Light type

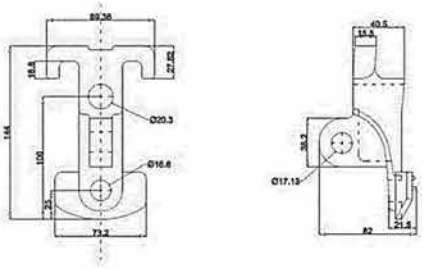


Guy thimbles are produced to hook and suspend wires when erecting a pole.

HE Code	Description	Ø mm	Wt. kg
HEGT-1116	Hole 11/16"	17.5	0.48
HEGT-1316	Hole 13/16"	21	0.47

Raw material: SAE1020
Finish: hot dip galvanized

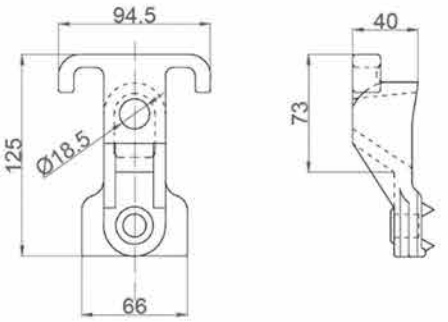
12.3 Guy Hooks



Guy hooks are produced to protect fibers of wood poles.
Hooks are usually used a clamp, a machine bolt , and two square nuts.

HE Code	Description	Wt.(kg)
HEGH-1116	Guy hook	0.35

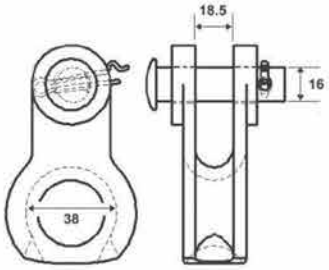
Material steel is hot dipped galvanized to ASTM A153.



HE Code	Description	Wt.(kg)
HEGH-2	Guy hook	0.7

Material: QT450
Finish: hot dip galvanized per ASTM A153

12.4 Thimbles

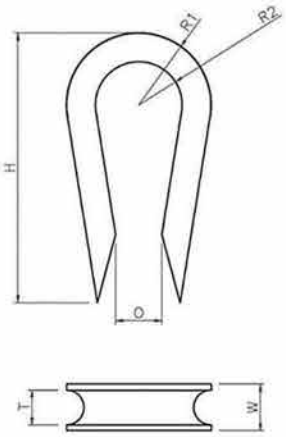


1, Guy Wire Thimble Clevis

Guy wire thimble clevis are produced to automatic deadend wires, and help to install guy grips.

HE Code	Description	Wt.(kg)	Min failing load kN
GWTC-1	Guy Wire Thimble Clevis	0.5	70

Ductile iron for part body is hot dip galvanized.
Stainless steel for split pins.



2, Guy Wire Thimbles

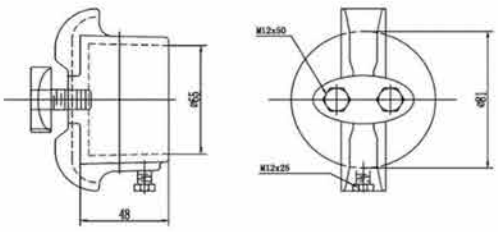
Guy wire thimbles are produced to provide a more desirable and larger wire seat diameter when terminating grips, deadend bails or cables to small diameter eye type fittings and bolts.
Thimbles are usually attached to oval eye anchor rods or bolts, or clevises.
Strand grooved to fit various rope sizes, and open end to slip over rods or eyes.

HE CODE	H	R1	R2	W	T	O	Wt.(kg)
JXH38	60	18.5	12	14	11	10	0.026
JXH12	68	22.25	14.5	17	13	16	0.05
JXH58	86	30.5	18.25	23	17	16	0.14
JXH34	93	34.5	20.5	27	20	20	0.2
JXH78	123	39.25	24.5	32	24	20	0.32
JXH1	142.5	47.25	30.5	33	25	20	0.4

Steel hot dip galvanized per ASTM A153.
Raw material: SAE1020
Finish: hot dip galvanized

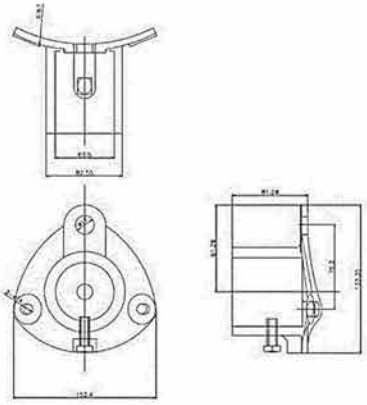
12.5 Sidewalk Guy Attachment

Sidewalk guy attachments are produced to provide larger space for standard guying near sidewalks and buildings.
They are used with standard pipes.



HE Code	Description	Wt.(kg)
SGA-1	Sidewalk guy attachment	1.8

Material is ductile iron, hot dip galvanized.

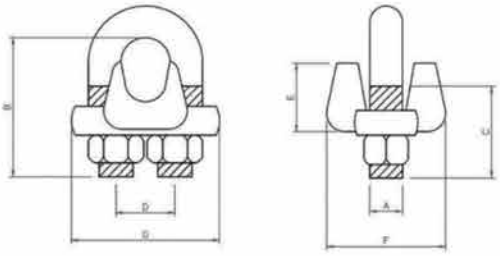


HE Code	Description	Height(mm)	Wt.(kg)
SQA-1	Sidewalk guy attachment	46	1.1
SQA-1	Sidewalk guy attachment	81.28	2.5

Material is ductile iron, hot dip galvanized.

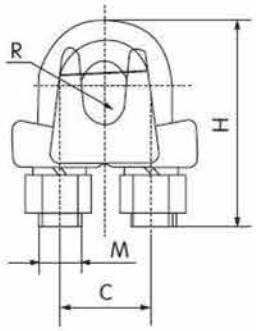
12.6 Wire Rope Clips

Guy clips are produced to connect steel wires from strands; they strongly secure wire ropes with down guys.



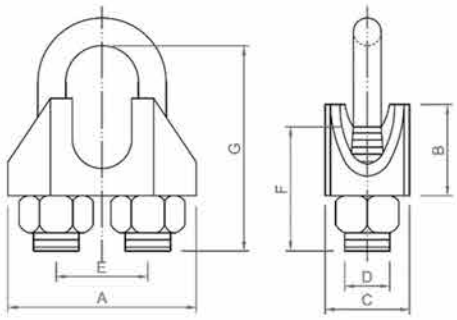
HE Code	A	B	C	D	E	F	G	Wt.(kg)
GCD1-4	7.9	26	12.7	19	16.8	30	36.3	0.082
GCD3-8	11.2	38	19	25.4	23	41.4	49	0.2
GCD1-2	12	47.8	25.4	30	28.7	48.5	57.9	0.33
GCD5-8	14.2	57	32	33	34	52	63	0.45
GCD3-4	15.7	70	36.6	38	35.3	57.2	72	0.64

Ductile iron for body; high strength steel for U-bolts.
All ferrous parts are hot dip galvanized per ASTM A153.



HE Code	Steel wire dia	Dimensions(mm)				Weight (kg)
		C	M	H	R	
HEGQ-0	5.4~6.4	18	8	44	4.5	0.08
HEGQ-1	6.6~7.8	22	10	54	5	0.18
HEGQ-2	9.0~11.0	27	12	60	6	0.25
HEGQ-3	13.0~14.0	30	14	75	7.5	0.35

The body is malleable iron. The other parts are steel.
All ferrous parts are hot-dip galvanized

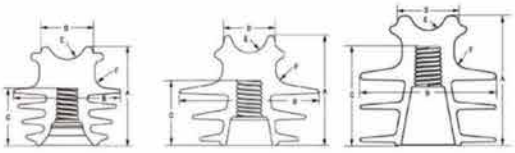


HE Code	SIZE	Bolt					Clip Body			Weight kg
		Bolt material length mm	D mm	F mm	E mm	G mm	A mm	B mm	C mm	
HECTD-1	3	⌀3.4*41	4	12	9	16	21	10	10	9
HECTD-2	5	⌀4.3*49	5	13	11	19	23	10	11	13
HECTD-3	6	⌀4.3*58	5	15	13	23	23	10	12	16
HECTD-4	8	⌀5.1*71	6	19	16	28	30	15	14	27
HECTD-5	10	⌀6.96*86	8	22	19	34	34	17	18	60
HECTD-6	11	⌀6.96*91	8	22	20	36	36	18	19	60
HECTD-7	13	⌀8.8*112	10	30	24	45	40	21	23	120
HECTD-8	14	⌀8.8*117	10	30	25	47	44	22	23	130
HECTD-9	16	⌀10.5*130	12	33	29	51	50	26	26	180
HECTD-10	19	⌀10.5*150	12	38	32	63	54	30	28	230
HECTD-11	22	⌀12.4*175	14	44	37	71	61	34	33	340
HECTD-12	26	⌀12.4*197	14	45	41	81	65	37	35	400
HECTD-13	30	⌀14.4*230	16	50	48	94	74	43	37	600
HECTD-14	32	⌀14.4*250	16	55	47	105	85	45	47	700
HECTD-15	34	⌀14.4*250	16	55	52	104	80	45	42	700
HECTD-16	40	⌀14.4*295	16	60	58	125	86	55	45	900
HECTD-17	45		18	62	65	140	108	64	50	1400
HECTD-18	50	16	18	65	68	160	109	64	50	1450

Insulators

13.1 HDPE Insulators

High-density polyethylene insulator (HDPE insulator) can be used in overhead electrical distribution system, compacted or conventional distribution aerial network.
It suits for high polluted area or salty coastal area in tropical zone.
HDPE insulators can be applied with jacketed or bare aluminum or copper overhead conductors.
It mainly applied in electric line of 15KV, 25KV and 35KV.



Cat No.	15F	25F	35F
Rated Voltage	15kV	25kV	35kV
Class	55-4	55-5	55-6
Material	HDPE	HDPE	HDPE
Dry Arcing Distance	160mm	183mm	254mm
Creepage distance	360mm	390mm	508mm
Cantilever Strength	13KN	13KN	13KN
Low Frequency Flashover Voltage-Dry	75kV	89kV	110kV
Low Frequency Flashover Voltage-Wet	50KV	60KV	75KV
Low Frequency Withstand Voltage Dry	70kV/min	70kV/min	90kV/min
Low Frequency Withstand Voltage Wet	40kV/min	50kV/min	70kV/min
Critical Impulse Flashover-Positive	110kV	140kV	160kV
Critical Impulse Flashover-Negative	145kV	170kV	200kV
Low Frequency Puncture Voltage	160kV	200kV	200kV
Color	Grey	Grey	Grey
Dimension	mm	mm	mm
A	130	150	181
B	140	190	191
C	88	99	140
D	68	68	85
E	25.4	25.4	25.4
F	16	20	19

13.2 Polymer Insulators

The composite insulator product consists of three parts: glass fiber epoxy resin rod, silicone rubber shed, and hardware.

Its silicone rubber shed adopts the integral injection molding process, which solves the key problem affecting the reliability of composite insulators, and the electrical breakdown of the interface is solved.

The connection between the glass lead rod and the metal fittings adopts the most advanced crimping tool and is equipped with an automatic sonic flaw detection system.

It has high strength, beautiful appearance, small size and light weight.

The metal fittings are galvanized to prevent rust and can be interchanged with porcelain insulators.

Use, this product has a reliable structure, does not damage the mandrel, and can give full play to its mechanical strength.

13.2.1 Tension indulatos

HE CODE	Rated voltage（kV）	Rated failing Load (KN)	Section length (mm) ±15	Dry arcing distance (mm)	Min. Creepage distance (mm)	Fin diameter (mm)	Lightning Impulse Withstand voltage（kV）	Power frequency 1min wet Withstand voltage
FXB-11-70CT-500	11	70	350	160	500	125/90	75	50
FXB1-15-70CT-420	15	70	350	185	420	100	95	55
FXB1-24-70CT-650	24	70	455	275	650	100	155	70
FXB1-24-70ST-720	24	70	455	275	720	100	155	70
FXB1-33-70CT-840	33	70	500	320	840	100	75	200
FXB-36-70CT-860	36	70	640	365	860	100	80	210
FXBW4-36-70SB-1350	36	70	670	455	1350	140/110	95	230
FXBW4-36-70CT-1350	35	70	670	455	1350	140/110	95	230
FXB- 66-70SB-2240	66	70	890	704	2240	140/110	185	410
FXB3-110-100(120)SB-3150	110	100 （120）	1260	1050	3150	142/110	335	750
FXB3-132-100(120)SB-3450	132	100 （120）	1395	1150	3450	142/110	350	820

13.2.2 Line Post insulators

69kV 66kV 33/66kV 24kV 11/15kV

HE CODE	Rated voltage（kV）	Min. Creepage distance (mm)	Rated failing Load (KN)		Lightning Impulse Withstand voltage（kV）	Power frequency 1min wet Withstand voltage	Section length (mm) ±5	Dry arcing distance (mm)
			Bending	Twist				
FZ-1115-560	11	560	6	1.2	45	110	470	230
FZ-2433-1250	24	1250	8	1.5	95	180	585	310
FZ-3336-1250	33	1250	8	1.5	95	180	740	475
FZ-6669-2160	66	2160	12.5	2	170	350	865	740

13.2.3 Post Insulators

HE CODE	Rated voltage（kV）	Rated Bending Load (KN)	Section length (mm) ±15	Dry arcing distance (mm)	Min. Creepage distance (mm)	Sheds Distance (mm)	Lightning Impulse Withstand voltage（kV）	Power frequency 1min wet Withstand voltage
FZSW-11-4-290	11	4	215	130	290	105/78	75	42
FZSW 15-5-600	15	5	260	185	600	138/112	105	55
FZSW-24-8-750	24	8	355	255	750	138/112	145	65
FZSW 33-8-1200	33	8	420	340	1200	126/92	150	70
FZSW 36-10-1200	36	10	500	390	1200	138/112	175	75
FZSW 69-12.5-2010	69	12.5	760	640	2010	146/117	410	185
FZSW 32-12.5-1900	132	12.5	1200	1900	3200	190/152	650	230

13.2.4 Pin insulators

HE CODE	Rated voltage （kV）	Rated Bending Load (KN)	Section length (mm) ±15	Dry arcing distance (mm)	Min. Creepage distance (mm)	Sheds Distance (mm)	Lightning Impulse Withstand voltage （kV）	Power frequency 1min wet Withstand voltage
FPQ-11-5-350	11	5	270	140	350	138/110	60	45
FPQ-15-5-490	15	5	330	195	490	138/110	65	140
FPQ-24-8-720	24	8	390	260	720	140/112	70	155
FPQ-33-8-1050	33	8	445	295	1050	140/112	75	150
FPQ-36-10-1200	36	10	500	330	1200	140/112	95	200

13.3 Porcelain Insulators

13.3.1 HIGH VOLTAGE PIN TYPE INSULATORS

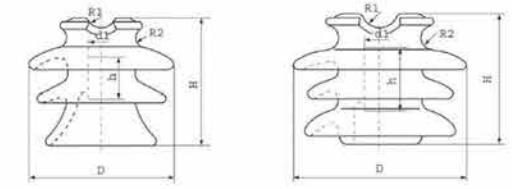
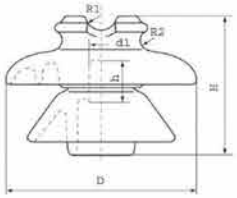
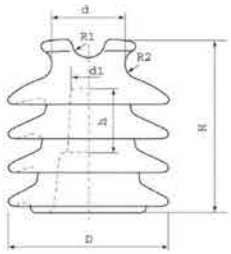


Fig 1

Fig 2





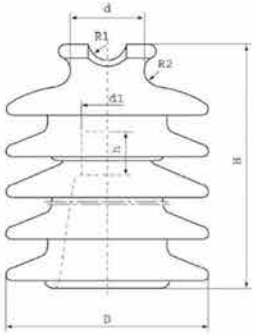
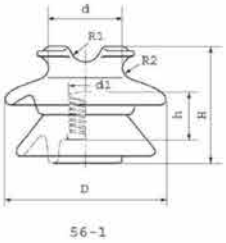
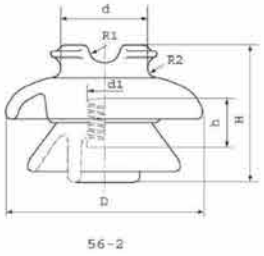


Fig 5

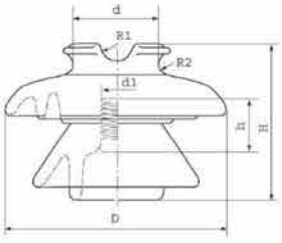
型号 Cat. No.	图号 Fig.	主要尺寸 Main dimension mm							爬电距离 Creepage Distance	弯曲强度 Cantilever Strength	耐受电压 Withstand voltage		工频击穿电压 Power Frequency Puncture Voltage	无线电干扰电压 Radio influence voltage		配用钢脚 Fitted Spindle
		D	H	d_1	h	R_1	R_2	d	mm	kN	一分钟工频湿耐受电压 One minute wet power frequency withstand voltage kV	冲击干耐受电压(峰值) Dry impulse withstand voltage (peak) kV	kV	对地试验电压 Test voltage to ground kV	1 MHz时最大值 Max. RIV at 1 MHz μV	
P-11-Y	1	140	133	18.29	48	13	9.5		240	11	45	80	150	15	8000/100	小钢头 Small steel head
P-15-Y	1	152	137	18.29	48	13	12.7		298	11	50	95	150	15	8000/100	
P-22-Y	2	230	165	27.78	52.63	19	14.3		432	11	70	125	200	22	12000/100	
P-33-Y	3	279	244	27.78	52.63	19	13		630	13.8	90	170	210	30	16000/100	大钢头 Large steel head
Pw-15-Y	4	170	185		52.63	16	16	76	432	11	50	95	150	22	12000/100	
Pw-22-Y	5	205	255		52.63	16	16	76	673	11	70	125	200	30	16000/100	
Pw-33-Y	5	240	320		52.63	16	16	76	851	11	90	170	210	44	25000/100	



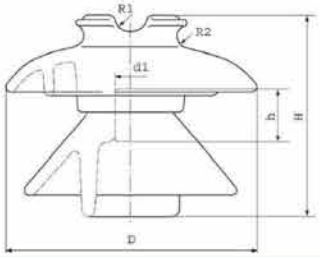
56-1

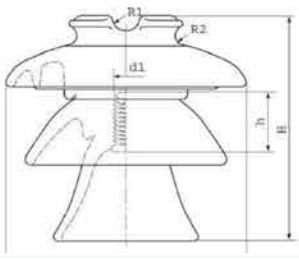


56-2



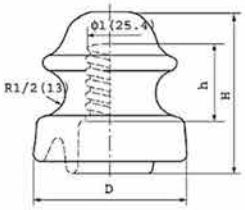
56-3



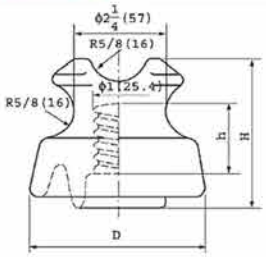


美标等级 ANSI Class	主要尺寸 Main dimension mm							爬电距离 Creepage Distance inch mm	最小钢脚长度 Min. pin length in mm	弯曲强度 Cantilever strength lb kN	闪络电压 Flashover voltage				工频击穿电压 Power Frequency Puncture Voltage kV	无线电干扰电压 Radio influence voltage	
											工频 Power frequency		冲击 Impulse			对地试验电压 Test voltage to ground kV	1 MHz 时最大值 Max. RIV at 1 MHz μV
	D	H	d	d1	h	R1	R2				干 Dry kV	湿 Wet kV	正 Positive kV	负 Negative kV			
56-1	7 1/2 (191)	5 3/4 (146)	3 1/2 (89)	1 3/8 (35)	2 (51)	3/4 (19)	9/16 (14)	3 (330)	6 (152)	2500 (11)	95	60	150	190	130	15	100
56-2	9 (229)	6 1/2 (165)	4 (102)	1 3/8 (35)	2 (51)	3/4 (19)	9/16 (14)	17 (432)	7 (178)	3000 (13.2)	110	70	175	225	145	22	100
56-3	10 1/2 (267)	7 1/2 (191)	4 (102)	1 3/8 (35)	2 (51)	3/4 (19)	9/16 (14)	21 (533)	8 (203)	3000 (13.2)	125	80	200	265	165	30	200
56-4	12 (305)	9 1/2 (241)		1 3/8 (35)	2 (51)	3/4 (19)	9/16 (14)	27 (685)	10 (254)	3000 (13.2)	140	95	225	310	185	30	200
56-5	13 1/2 (343)	12 1/2 (318)		1 3/8 (35)	2 1/8 (54)	3/4 (19)	9/16 (14)	34 (864)	12 (305)	3000 (13.2)	175	125	270	340	225	44	200

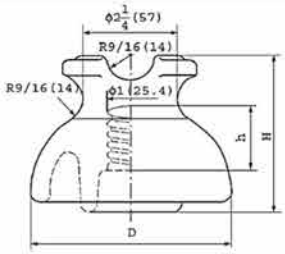
13.3.2 LOW & MEDIUM VOLTAGE PIN TYPE INSULATORS



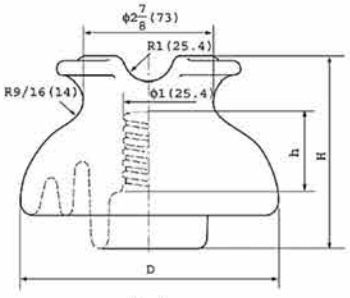
55-1



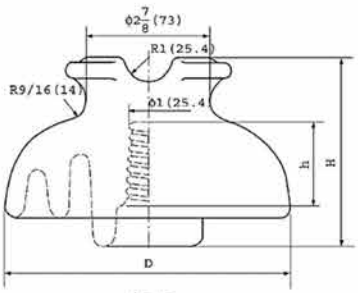
55-2



55-3



55-4



55-5

ANSI Class	Main dimension			Creepage Distance inch mm	Min. pin length in mm	Cantilever strength lb kN	Flashover voltage				Power Frequency Puncture Voltage kV	Radio influence voltage	
							Power frequency		Impulse			Test voltage to ground kV	1 MHz Max. RIV at 1 MHz v
	D	H	h				Dry kV	Wet kV	Positive kV	Negative kV			
55-1	3 1/4 (83)	3 1/2 (89)	1 3/4 (44)	4 (102)	4 (102)	3000 (13)	35	20	50	70	50	5	2500/ 50
55-2	3 3/4 (95)	3 1/4 (83)	1 1/2 (38)	5 (127)	4 (102)	2500 (11)	50/45	25	75/70	95/85	70	5	2500/50
55-3	4 3/4 (121)	3 3/4 (95)	1 1/2 (38)	7 (178)	5 (127)	2500 (11)	65/55	35/30	100/90	130/110	90	10	5500/ 50
55-4	5 1/2 (140)	4 3/8 111)	1 3/4 (44)	9 (229)	5 (127)	3000 (13)	70/65	40/ 35	110/105	140/130	95	10	5500/ 50
55-5	7 (178)	4 7/8 (124)	2 (51)	12 (305)	6 (152)	3000 (13)	85/80	45	140/130	170/150	115	15	8000/ 100

13.3.3 STAY INSULATORS

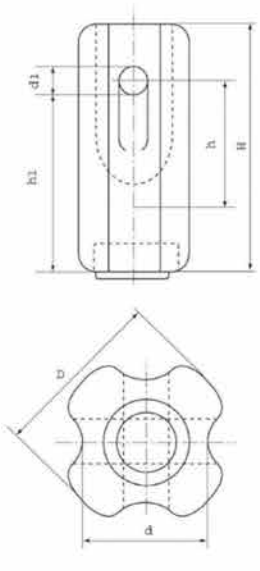


Fig 1

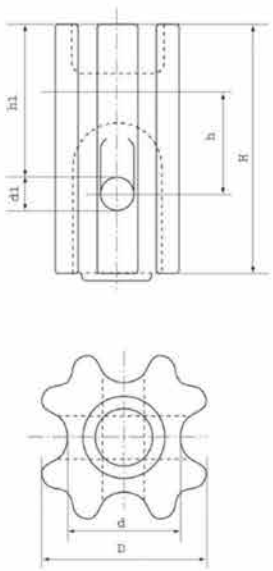


Fig 2

Fig.	Type	Creepage Distance mm	Tensile strength kN	Power frequency voltage 50Hz kV		Main dimension mm						Weight kg	Applicable standard
				Dry	Wet	H	h	h1	D	d	d1		
1	54-1	41	44	25	12	89	44	64	64	44	16	0.5	ANSI C29.4
1	54-2	48	53	30	15	108	57	76	73	54	22	0.65	
1	54-3	57	89	35	18	1 40	67	103	86	60	25	1.2	
2	54-4	76	89	40	23	172	79	114	89	60	25	1.85	

13.3.4 Spool Insulators

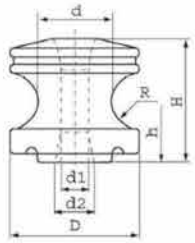


Fig 1

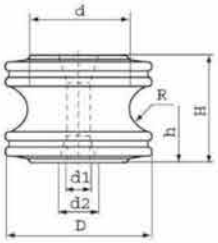


Fig 2

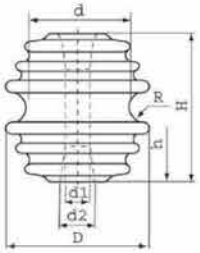


Fig 3

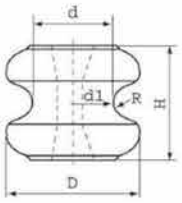


Fig 4

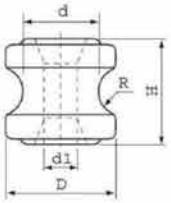


Fig 5

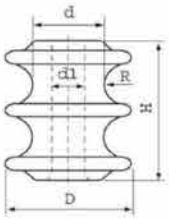


Fig 6

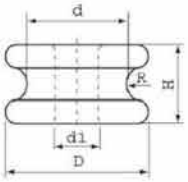
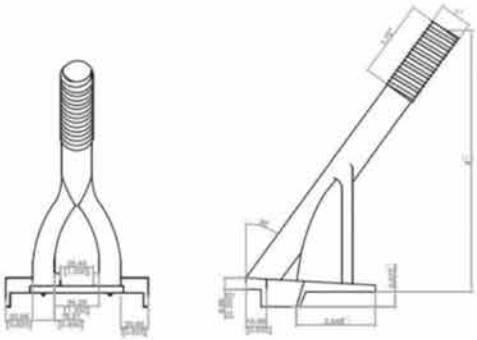


Fig 7

ANSI Class	Fig.	Main dimension mm							Transverse strength N	Power frequency voltage kV			Weight (10pcs) kg
		H	h	D	d	d1	d2	R		Dry flashover	Wet flashover		
											Vertical	Horizontal	
53-1	2	54	27	57	45	18	22	11	8,900	20	8	10	2.2
53-2	1	76	38	79	45	18	24	18	13,300	25	12	15	5.4
53-3	2	81	40.5	76	45	18	24	1,1	17,800	25	12	15	5.9
53-4	2	76	38	105	73	18	24	16	20,000	25	12	15	11.3
53-5	3	105	52.5	102	73	18	24	11	26,700	35	18	25	11.8
R-8	7	32		57	40	17.5		7			15	918	1.3
R-6	6	80		70	40	18		7	240	12	18	1350	3.9
R-2	5	76		80	54	17.5		17.5			18	2040	5.9
R-1	5	54		57	39	17.5		11			18	918	2.4
1617	4	65		76	46	17.5		9	9000	20	9	9	3.9
1617-1	4	65		78		17.5		17.5					
1617-2	4	67		73		16		14.3					
1618-1	4	75		89	52	17		13	10000	20	9	9	
1618-2	4	75		89	52	17		12.5	13000	25	12	12	
1618-3	4	88		95		22		16					

Insulator Pins and Studs

14.1 Crossarm Corner Pins

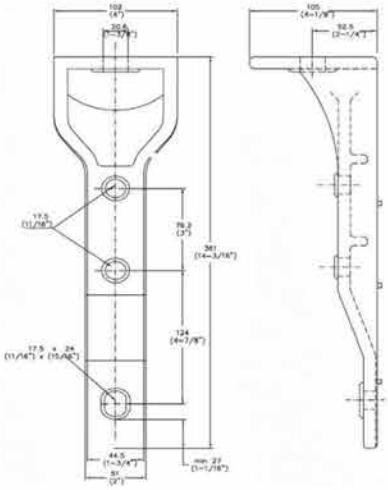


Crossarm corner pins are produced to mount insulators at an angle.
Bolts are used to attach corner pins to cross arms.

HE Code
CCP-01

Pins are made of ductile iron, hot-dip galvanized to ASTM A153.

14.2 Insulator Mounting Bracket

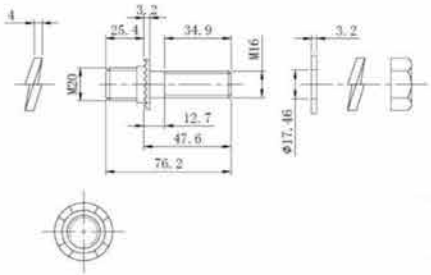


He Code
LPB1116

Material is ductile iron to ASTM 65 – 45 – 12 .
Hot dip galvanized to ASTM A153.

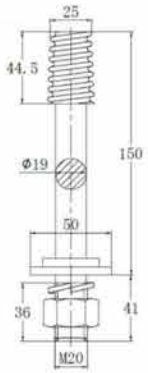
14.3 Insulator Mounting Studs

Insulator mounting studs, or line post insulator pins are produced to attach insulators to cross arms.



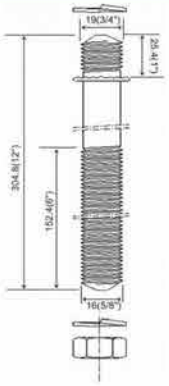
HE Code
IMS-1

Material: carbon steel
Finish: hot dip galvanized



HE Code
IMS-2

Material: carbon steel
Finish: hot dip galvanized

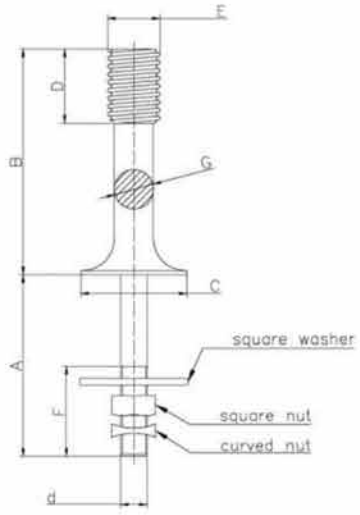


HE Code
IMS-3

Material: carbon steel
Finish: hot dip galvanized

14.4 Insulator Pins Round neck

Transmission high voltage insulator pins are produced from one-piece forgings, hot dip galvanized to ASTM A-153.
Pins are made for wood crossarms, the long-shank type pins are assembled with square washer, square nut and MF lock nut.
Lead threads are free of fins and mold-marks, perfect insulator seating.
Apply to nylon thread and lead thread.

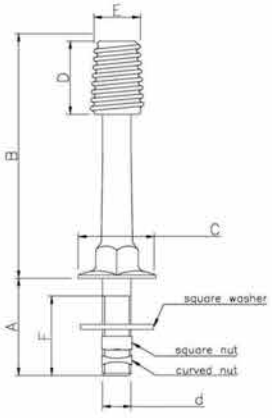


HE Code	Dimensions								For
	A	B	C	D	E	F	G	d	crossarm
IPTL58-1	6 1/2"	6"	2 3/4"	2"	1"	3 1/2"	1"	5/8"	wood
IPTL58-2	7"	7"	3"	2"	1 3/8"	3 1/2"	1"	5/8"	wood
IPTS58-3	1 3/4"	8"	2 1/8"	2"	1 3/8"	1 1/2"	1"	5/8"	Steel
IPTS34-1	1 3/4"	7"	3"	2 3/8"	1 3/8"	1 1/2"	1"	3/4"	Steel
IPTL34-1	6 1/2"	5"	2 5/8"	2 1/8"	1"	2 1/2"	7/8"	3/4"	wood
IPTL34-2	6 1/2"	6"	2 5/8"	2 1/8"	1"	2 1/2"	7/8"	3/4"	wood
IPTL34-3	6 1/2"	7"	2 3/4"	2"	1"	3 1/2"	7/8"	3/4"	wood
IPTL34-4	7"	7"	3"	2"	1 3/8"	3"	1"	3/4"	wood
IPTL34-5	7"	8"	3"	2"	1 3/8"	3"	1"	3/4"	wood
IPTS34-5	1 3/4"	8"	2 1/8"	2"	1 3/8"	1 1/2"	1"	3/4"	Steel
IPTL34-6	7"	10"	3 1/2"	2 1/8"	1 3/8"	3 1/2"	1 1/8"	3/4"	wood

Material: carbon steel
Finish: hot dip galvanized

14.5 Insulator Pins Square neck

Distribution low voltage insulator pins, long shank pins are assembled with square nut, square washer and MF lock nut, for use on wood crossarms.
Short shank pins are with spring washer and square nut only, for use on steel crossarms.
Wrenching shoulder is in square shape to allow rotating the insulator groove into position.
Broad bases of the pins are to distributes tension and rest evenly on arms to provide a firm seat.
Pins are available in both nylon alloy threads and lead threads.

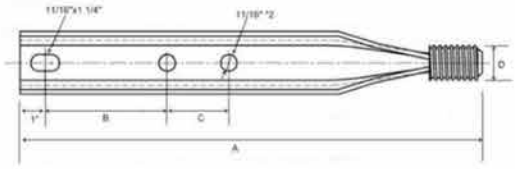


HE Code	Dimensions							Wt.	For
	A	B	C	D	E	F	d	kg	crossarm
IPDL58-1	5 3/4"	5"	2"	1 3/4"	1"	3"	5/8"	0.816	wood
IPDL58-2	5 3/4"	6"	2"	1 3/4"	1"	3"	5/8"	0.835	wood
IPDL58-3	5 3/4"	7 7/8"	3"	1 3/4"	1"	3"	5/8"	1.315	wood
IPDL58-4	6 1/2"	5"	2"	1 3/4"	1"	3"	5/8"	0.871	wood
IPDL58-5	6 1/2"	6"	2"	1 3/4"	1"	3"	5/8"	0.889	wood
IPDL58-6	7 3/4"	7 7/8"	3"	2"	1"	3"	5/8"	1.542	wood
IPDL34-1	6 1/2"	6"	2 1/2"	2"	1"	3 1/4"	3/4"	1.197	wood
IPDS58-1	1 1/2"	5"	2"	1 3/4"	1"	1 1/4"	5/8"	0.562	steel
IPDS58-2	1 1/2"	6"	2"	2"	1"	1 1/4"	5/8"	0.617	steel
IPDS34-1	1 3/4"	6"	2 1/2"	2"	1"	1 5/8"	3/4"	0.835	steel

Material: carbon steel
Finish: hot dip galvanized

14.6 Pole Top Pins

Pole top pins are produced for pole and transformer wiring, are mounted to poles by bolts.
Pins are usually manufactured with one mounting holes and one mounting slot at bottom. Nylon threads are environmental friendly, with no disposal problems, but equal insulator alignment and strength as lead thread.

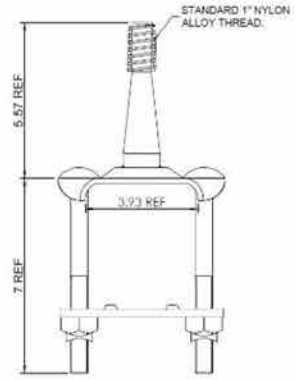


HE Code	Dimensions				Wt.
	A	B	C	D	kg
PTP1501	15"	5"	4"	1"	1.31
PTP1801	18"	5"	3"	1"	1.61
PTP2001	20"	5"	3"	1"	1.8
PTP2002	20"	8"	4"	1"	1.81
PTP2401	24"	5"	3"	1"	2.21
PTP2402	24"	5"	3"	1 3/8"	2.23

Pins are made of a single pressed steel,hot dip galvanized to ASTM A-153.
Pole top pins are manufactured in nylon alloy or ANSI standard cast lead insulator threads.

14.7 Saddle Pins

Saddle pins are produced for straight-line, angle or corner constructions.
Because of its appearance, it is also called clamp pin. It has a forged pin body, a wide base, two carriage bolts, two square nuts, two MF curved lock nuts, and a washer plate.
The pin body and wide base saddle is welded together. Base is mounted to cross arms with the two carriage bolts, which can keep pins from slipping or twisting.



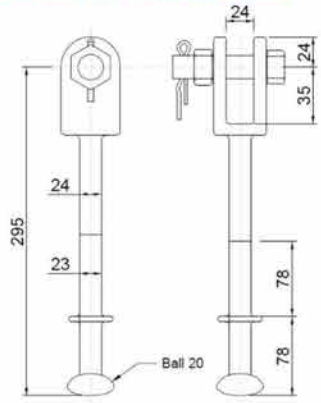
HE Code	Dimensions			Wt.
	Thread Dia.	Arm Size	Height above arm	kg
SP1	1"	3 3/4"×4 3/4"	6"	2.72
SP138	1 3/8"	3 3/4"×4 3/4"	7"	3.59

Pin body is steel hot dip galvanized; with nylon alloy insulator threads.
Carriage bolts: 5/8″×7″
Washer plate: 5/16″×1 1/2″

Link Fittings

15.1 Ball Clevis

15.1.1 Ball Clevis Extension links

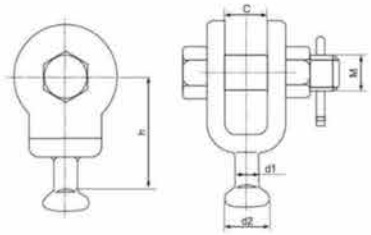


HE Code	Description
BCL-1	ball clevis extension link

Material: Steel for body, stainless steel for split pin
Finish: Hot dip galvanized

15.1.2 Ball Clevis Q-U Type

Ball clevis are produced to joint the socket-ended parts with eye-ended parts at insulator string.

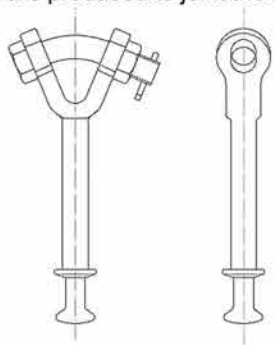


HE Code	Dimensions(mm)					Designated size of coupling	Rated failure load	Wt.
	h	d1	d2	M	C		(KN)	(kg)
Q-7U	89	17	33.3	16	18	16	70	0.9
Q-12U	94	17	33.3	22	22	16	120	1
Q-16U	78	21	41	24	24	20	160	1
Q-16UA	80	21	41	24	26	20	160	1.12
Q-21U	102	21	41	27	30	20	210	1.35
Q-30U	110	25	49	36	38	24	300	2.14

Material: Steel for body, stainless steel for split pin
Finish: Hot dip galvanized
Ball according to IEC 120
Clevis according to IEC 471

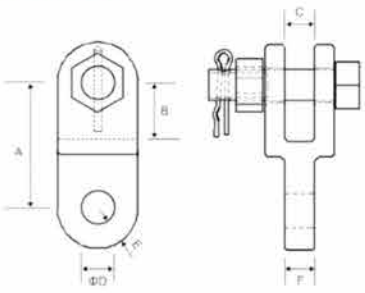
15.1.3 Ball Clevis Q-Y Type

Ball clevis are produced to joint the socket-ended parts with eye-ended parts at insulator string.



Material: Steel for body, stainless steel for split pin
Finish: Hot dip galvanized
Ball according to IEC 120
Clevis according to IEC 471

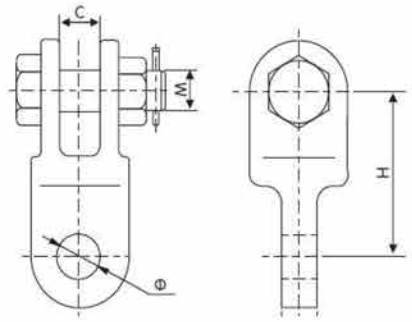
15.1.4 Clevis Eyes



1, Clevis Eyes

HE Code	Description	Dimensions						Wt. kg	Minimum failing load (kN)
		A	B	C	ΦD	E	F		
CE-1	Clevis eye	72	28	20	18	22	16	0.7	70
CE-2	Clevis eye	72	28	20	18	22	16	0.7	120
CE-3	Clevis eye	86	35	24	22	24	20	1.1	160

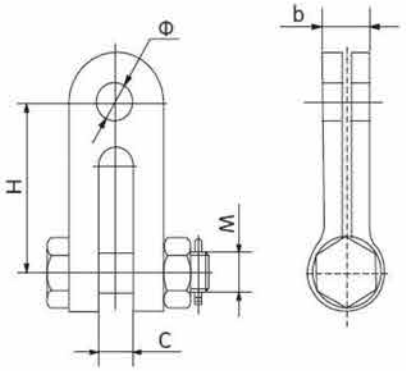
Material: galvanized forged steel for body, stainless steel for split pin
Finish: Hot dip galvanized
Clevis according to IEC 471



2, HEZD Type Clevis

HE Code	Dimensions(mm)					Specified failure load(kN)	Weight (kg)
	C	H	Φ	b	M		
HEZD-1	20	80	18	16	16	70	0.9
HEZD-2	20	80	18	16	18	70	1.1
HEZD-3	20	80	18	16	22	70	1.3

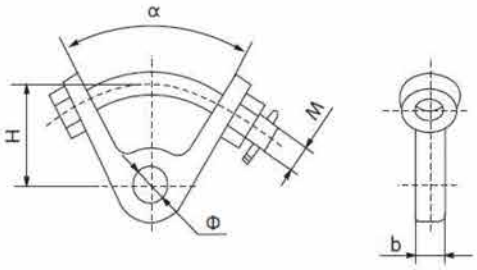
The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.



3, HEZS Type Clevis

HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	C	b	M	Φ	H		
HEZS-78	18	16	16	20	80	70	0.58
HEZS-76	20	22	16	20	65	70	0.65
HEZS-10	20	18	18	20	80	100	0.9
HEZS-12	22	22	22	24	80	120	1
HEZS-16	26	24	24	26	90	160	1.6
HEZS-25	33	30	30	33	120	250	4.33
HEZS-30	38	34	36	39	150	300	5.64

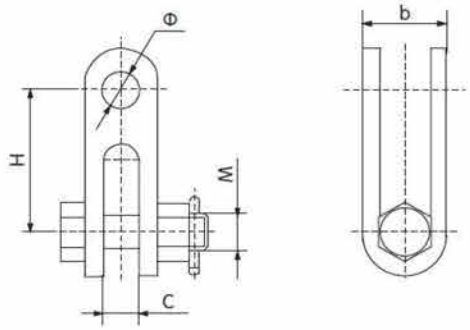
The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.



4, HEVC HEVD Type Clevis

HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	b	Φ	M	H	α		
HEVC-7	40	18	20	75	60°	70	1.8
HEVD-7	28	18	20	75	60°	70	1.4

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



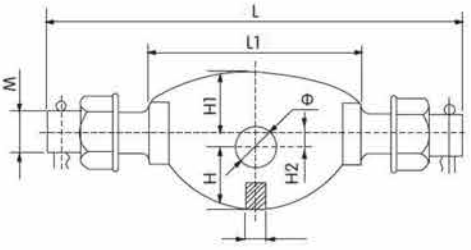
5, HZSC type Clevis

HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	C	b	M1	M2	H		
HZSC-1	22	30	18	16	70	70	1.8
HZSC-2	28	44	24	18	85	120	3.8
HZSC-3	28	44	26	18	85	150	4.1

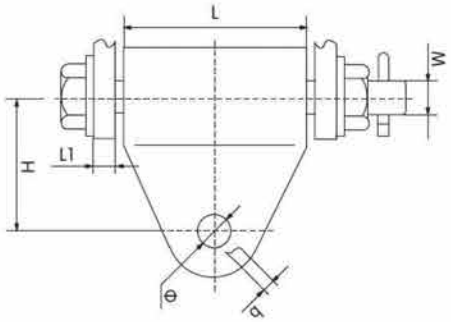
6, Twisted strap

HE Code	Dimensions(mm)								Specified failure load (kN)	Weight (kg)
	b	Φ	H	H1	H2	M	L	L1		
HETS-12S	16	24	30	30	12	22	230	112	120	1.7
HETS-21S	20	26	40	35	12	24	250	112	210	2.1
HETS-32S	28	33	40	36	12	30	258	112	320	3.6
HETS-42S	32	39	45	36	12	36	278	130	420	4.2
HETS-50S	32	39	48	50	12	36	278	112	500	4.6
HETS-12	16	24	30	35	12	22	250	112	120	1.35
HETS-21	18	26	35	35	12	24	250	112	210	1.8
HETS-30	30	33	46.5	35	12	30	264	112	300	3.3
HETS-50	34	44	50	40	12	36	264	112	500	6
HETS-60	42	50	50	46	16	42	290	112	600	6.5

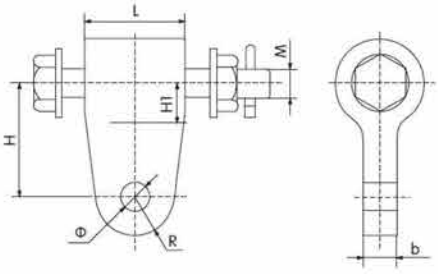
The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.



7, Joint hung Plate



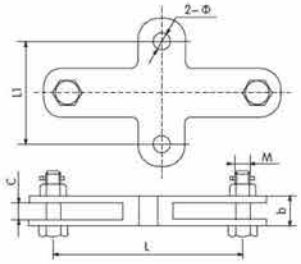
HE Code	Dimensions(mm)					Specified failure load(kN)	Weight (kg)
	b	Φ	H	M	L		
JHP-10	18	20	100	24	80	100	1.9
JHP-12	18	24	100	24	80	120	2.71
JHP-16	18	26	100	24	80	160	3.5
JHP-30	32	39	100	36	80	300	6.8
EJHP-50D	34	39	125	36	116	500	13
EJHP-70	38	45	125	42	136	700	14.4
EJHP-70A	38	45	150	64	195	700	29.9
EJHP-70B	42	51	150	64	195	700	29.7
EJHP-70C	38	45	125	42	116	700	13.3



HE Code	Dimensions(mm)							Specified failure load(kN)	Weight (kg)
	L	H	H1	Φ	R	M	b		
EJHP-2207	45	80	23	18	22	18	16	70	1.7
EJHP-2410	60	100	46	20	24	22	16	100	2
EJHP-3012	60	100	48	24	30	24	16	120	3
EJHP-3216	80	100	48	26	32	24	18	160	3.4
EJHP-3221	100	100	50	26	32	36	20	210	7
EJHP-3625	100	100	50	30	36	36	24	250	7
EJHP-4032	100	100	50	33	40	36	28	320	7.2

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.

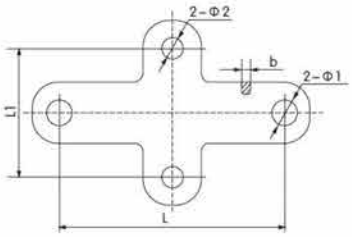
8, Double crossing clevis



HE Code	Dimensions(mm)						Specified failure load(kN)	Weight (kg)
	M	Φ	L	L1	b	C		
HSSC-6	16	14	200	80	36	20	60	3.8
HSSC-7	16	14	100	80	36	20	70	2.5

Hot-dip galvanized steel.

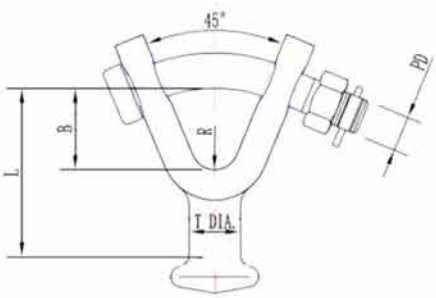
9, Single crossing clevises



HE Code	Dimensions(mm)					Specified failure load(kN)	Weight (kg)
	1	2	L	L1	b		
HDSC-7	18	14	200	80	16	70	1.3
HDSC-10	18	14	150	80	18	100	1.52
HDSC-16	26	14	100	80	18	160	1.4

Hot-dip galvanized steel.

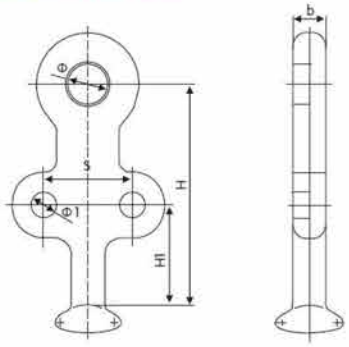
15.1.5 Clevis Y-Ball



HE Code	Description	Minimum failing load
		kN
HEYC-2201	52-8	220
HEYC-2202	52-5	160

Material: galvanized forged steel for body, stainless steel for split pin
Finish: Hot dip galvanized
Clevis according to IEC 471
Cotter bolt: M19, M22

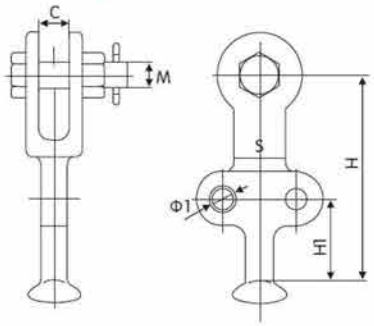
15.1.6 Ball eyes QCE



HE Code	Dimensions(mm)						Designated size of coupling	Specified failure load (kN)	Weight (kg)
	Φ1	Φ	b	H1	H	S			
QCE-07100	13	18	16	50	100	45	16	70	0.8
QCE-10110	13	20	16	50	110	45	16	100	0.9
QCE-12110	13	24	16	50	110	45	16	120	0.9

Hot-dip galvanized steel.

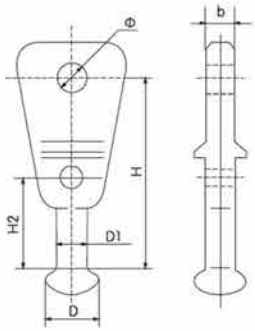
15.1.7 Ball eyes QSEC



HE Code	Dimensions(mm)						Designated size of coupling	Specified failure load (kN)	Weight (kg)
	C	M	Φ1	H1	H	S			
QSEC-07125	20	16	13	50	125	45	16	70	1
QSEC-10125	20	18	13	50	125	45	16	100	1.1
QSEC-12125	20	22	13	50	125	45	16	120	1.2

Hot-dip galvanized steel.

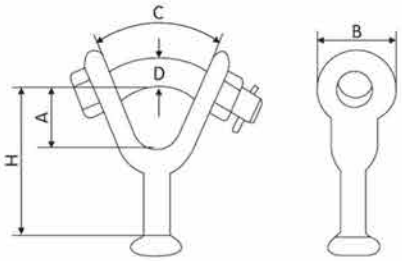
15.1.8 Ball eyes HEQE



HE Code	Dimensions(mm)						Suitable insulator	Specified failure load (kN)	Weight (kg)
	C	b	H	H2	D	D1			
HEQE-7P		16			33.3	17	XP-7	70	1.1
HEQE-12P		18			33.3	17	XP-12	120	1.3

Hot-dip galvanized steel.

15.1.9 Ball eyes QEY

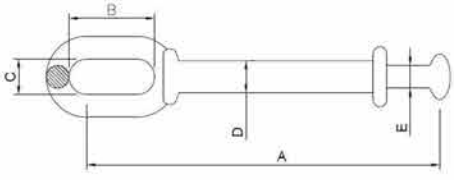


HE Code	Designated size of coupling	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
		A	B	C	D	H		
QEY-7	16	38	40	45°	16	75	70	0.77
QEY-10	16	40	42	45°	18	75	100	0.77
QEY-12	16	40	44	45°	18	82	120	0.77

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

15.2 Ball Eyes

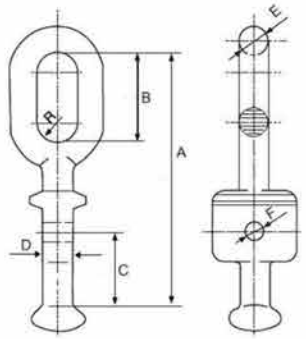
15.2.1 Ball Eyes Extension Link



HE Code	Dimensions					Minimum failing load (KN)	Wt. kg
	A	B	C	D	E		
BEL250	250	64	32	24	20	160	1.3
BEL500	500	64	32	24	20	160	2.3
BEL800	800	64	32	24	20	160	3.4

Body material: hot dip galvanized steel

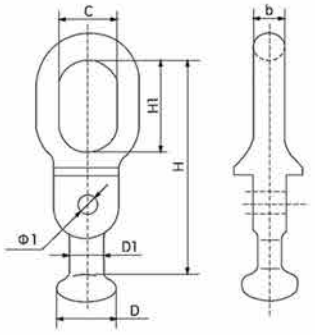
15.2.2 Ball Eyes QN Type



1, Ball Eyes QN Type

HE Code	Dimensions(mm)							Designated size of coupling	Rated failure load (KN)	Wt. (kg)
	A	B	C	D	E	F	ΦR			
QN-7	165	56	48	17	16	14	12.5	16	70	1.2
QN-10	165	56	48	17	16	14	12.5	16	100	1.3
QN-12	165	56	48	17	16	14	12.5	16	120	1.5
QN-16	175	80	48	20	20	14	15	20	160	1.8

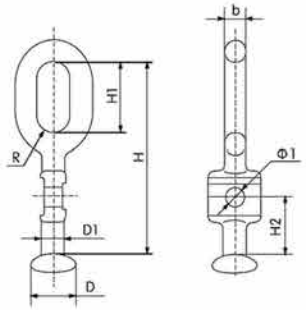
Body material: hot dip galvanized steel



2, Ball eyes(Parallel type)

HE Code	Dimensions(mm)						Suitable insulator	Specified failure load(kN)	Weight (kg)
	C	b	H	H1	D	D1			
HEQ-7P	18	16		130	33.3	16	XP-7	70	1
HEQ-12P	22	18		145	33.3	18	XP-12	120	1.3

Hot-dip galvanized steel.



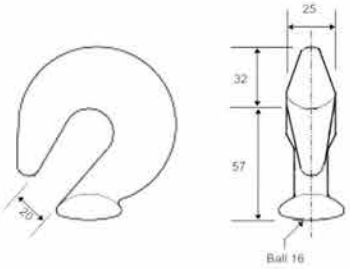
3, Ball eyes

HE Code	Dimensions(mm)								Suitable insulator	Specified failure load (kN)	Weight (kg)
	R	b	H	H1	Ø1	H2	D	D1			
HEQ-10N		16	152	51	14		33.3	17	16	100	0.7
HEQP-12N		18	165	68	14		33.3	17	16	120	0.8

Hot-dip galvanized steel.

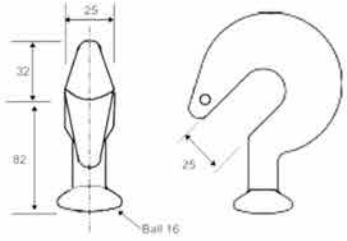
15.2.3 Ball Hooks

Ball hook types: long shank ball hook; two shank ball hook
Long shank ball hooks have a optional hole for safety latch.



HE Code	Description
BHS-1	short shank ball hook

Material: forged steel
Finish: hot dip galvanized to ASTM A153
Minimum failing load Kn: 70

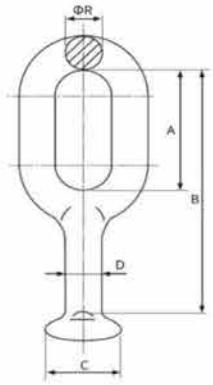


HE Code	Description
BHL-1	long shank ball hook

Material: forged steel
Finish: hot dip galvanized to ASTM A153
Minimum failing load Kn: 70

15.2.4 Oval Ball Eyes

Oval ball eyes are produced to tie arcing fitting and jointing socket with shackle-ended parts at insulator strings.

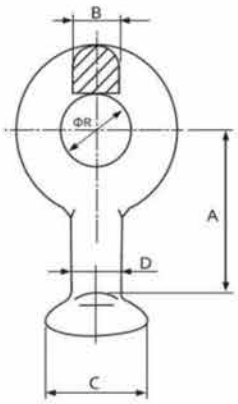


HE Code	Dimensions(mm)					Designated size of coupling	Rated failure load (KN)	Wt. (kg)
	A	B	C	D	ΦR			
QH-7	57	100	33.3	17	16	16	70	0.6
QH-10	57	100	33.3	17	18	16	100	0.6
QH-12	65	114	33.3	17	19	16	120	1.1
QH-16	80	127	41	21	18	20	160	1.3
QH-20	85	135	41	21	22	20	160	1.5
QH-21	80	150	41	21	20	20	210	1.3
QH-30	98	150	49	25	22	24	300	1.7

Material: Hot dip galvanized steel ASTM A536

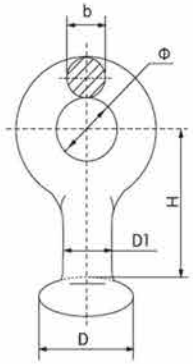
15.2.5 Round Ball Eyes

Oval ball eyes are produced to joint socket-ended parts with clevis-ended parts at insulator strings.



HE Code	Dimensions(mm)					Designated size of coupling	Rated failure load (KN)	Wt. (kg)
	A	B	C	D	ΦR			
QP-7	50	16	33.3	17	20	16	70	0.3
QP-10	50	16	33.3	17	20	16	100	0.3
QP-12	60	20	41	21	24	20	120	0.5
QP-12G	60	17	33.3	17	24	16	120	0.4
QP-16	60	20	41	21	26	20	160	0.5
QP-16G	60	18	41	21	26	20	160	0.5
QP-20	80	24	49	25	30	24	200	1
QP-21D	70	24	41	21	30	20	210	0.9
QP-30	80	28	49	25	39	24	300	1.1
QP-2120G	80	20	41	21	26	20	210	0.7
QP-3224G	80	28	49	25	33	24	320	1.2
QP-4228G	100	32	57	29	39	28	420	1.5

Material: Hot dip galvanized steel
Ball according to IEC 120
Eye according to IEC 471

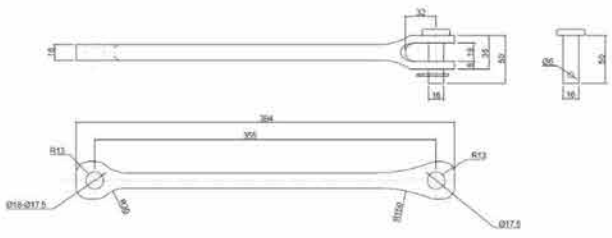


HE Code	Dimensions(mm)					Designated size of coupling	Rated failure load (KN)	Wt. (kg)
	Ø	b	H	D	D1			
Q-7	22	16	50	33.3	17	16	70	0.3

Hot-dip galvanized steel.

15.3 Extension Link Rod

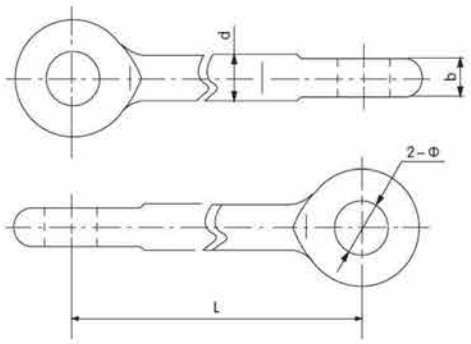
15.3.1 Extension link is designed to provide extra link distance to fittings.



HE Code	Description	Min failing load(KN)
HEYC-1070	Extension Link	70

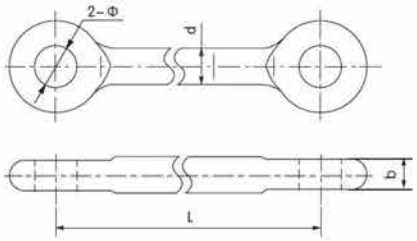
Material steel is hot dip galvanized.

15.3.2 Extension rods



HEYR type

HE Code	Dimensions(mm)				Specified failure load (kN)	Weight (kg)
	Φ	d	L	b		
HEYR-0743	18	18	430	16	70	1.5
HEYR-1012	20	18	120	16	100	0.8
HEYR-1040	20	18	400	16	100	1.1
HEYR-1050	20	18	500	16	100	1.4
HEYR-1066	20	18	660	16	100	1.7
HEYR-1069	20	18	690	16	100	1.9
HEYR-1243	24	22	430	18	120	1.6
HEYR-1640	26	22	400	18	160	1.6
HEYR-1643	26	22	430	18	160	1.6
HEYR-1655	26	22	550	18	160	2.5
HEYR-1657	26	22	570	18	160	2.7
HEYR-2043	30	24	430	20	200	3
HEYR-2155	30	26	550	20	210	3.1
HEYR-2165	30	26	650	20	210	3.1

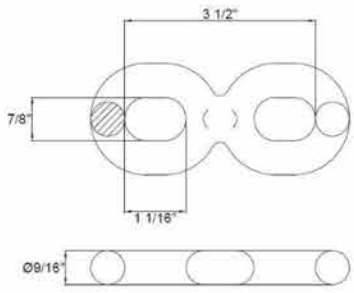


HEYP type

HE Code	Dimensions(mm)				Specified failure load (kN)	Weight (kg)
	Φ	d	L	b		
HEYP-16260	26	24	260	20	160	1.6
HEYP-16850	26	24	850	20	160	3.7
HEYP-16910	26	24	910	20	160	3.9
HEYP-16970	26	24	970	20	160	4.1
HEYP-16990	26	24	990	20	160	4.3
HEYP-25855	33	30	855	30	250	6.2
HEYP-25915	33	30	915	30	250	6.6
HEYP-25935	33	30	935	30	250	6.7

15.4 Eye Link

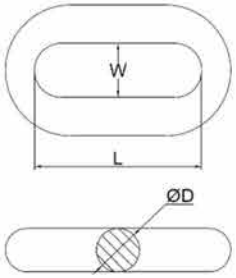
15.4.1 Double Eyes Link



HE Code
DEL-1

Body material: hot dip galvanized steel

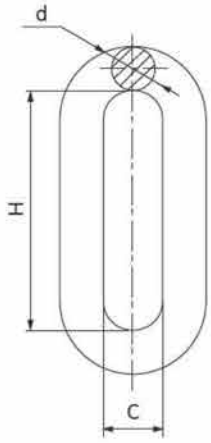
15.4.2 Single Eye Link



Single Eye Link

HE Code	Dimensions			Wt.	Ultimate strength
	L	W	ΦD	kg	lbs
LE12	2 1/4″	1″	1/2″	0.186	20000
LE58	3″	1″	5/8″	0.331	30000

Link eyes are forged from ASTM A36 steel. Hot dip galvanized to ASTM A153

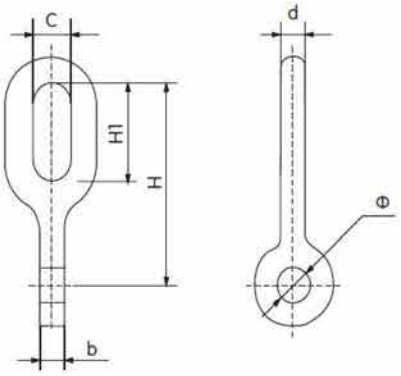


Extension ring(ring monoblock forging)

HE Code	Dimensions			Specified failure load (kN)	Weight (kg)
	c	d	L		
HEYH-7	20	16	80	70	0.4
HEYH-10	22	18	100	100	0.6
HEYH-12	24	20	120	120	0.9
HEYH-16	26	22	140	160	1.5
HEYH-21	30	24	160	210	1.6
HEYH-25	34	26	160	250	2
HEYH-30	38	30	180	300	3
HEYH-0708	20	16	80	70	0.4
HEYH-1010	22	16	100	100	0.5
HEYH-1212	24	18	120	120	0.9
HEYH-1612	26	20	120	160	0.9
HEYH-2113	26	20	130	210	1
HEYH-2512	32	24	120	250	1.3
HEYH-3214	36	28	140	320	2

Hot-dip galvanized steel.

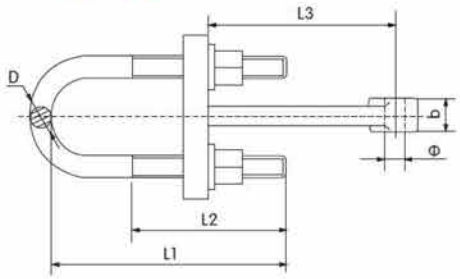
15.4.3 Eye chain links



HE Code	Dimensions(mm)						Specified failure load(kN)	Weight (kg)
	d	b	C	Φ	H1	H		
HEEL-7	16	16	24	20	57	100	70	0.85
HEEL-10	18	16	24	20	57	100	100	1.12
HEEL-12	20	16	24	24	65	115	120	1.2
HEEL-16	22	18	26	26	75	135	160	1.8
HEEL-21	24	26	32	30	75	150	210	2.3
HEEL-07100	16	16	24	20	57	100	70	0.9
HEEL-10100	16	16	20	20	57	100	100	1
HEEL-12115	18	16	22	24	65	115	120	1.1

Hot-dip galvanized steel.

15.4.4 Adjusting links



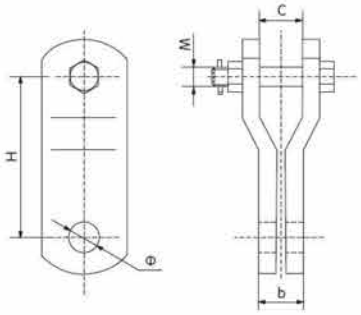
HE Code	Dimensions(mm)						Specified failure load(kN)	Weight (kg)
	L1	L2	L3	b	D	Φ		
HEAL-6	125	90	110	16	16	18	60	1.7
HEAL-7	157	106	120	16	18	18	70	2.5
HEAL-10	160	110	140	16	20	20	100	3.7
HEAL-12	160	110	140	16	22	24	120	4
HEAL-16	160	110	140	20	24	24	160	4.2
HEAL-21	220	150	175	26	24	26	210	7.7
HEAL-30	255	175	220	32	36	39	300	9.2

Hot-dip galvanized steel.

15.5 Link Plates

15.5.1 Clevis Straps

Clevis straps are produced to joint eye-ended parts with clevis-ended parts at insulator strings.



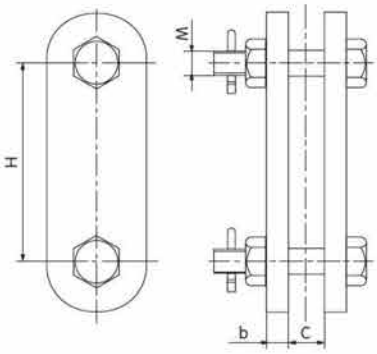
Clevis

HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	c	b	M	Φ	H		
HEPX-7	20	16	16	18	90	70	0.6
HEPX-10	20	18	18	20	100	100	0.8
HEPX-12	20	20	22	24	95	120	1.5
HEPX-16	26	24	24	26	155	160	2.7
HEPX-30	38	34	36	39	140	300	5.3

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

15.5.2 Double Plates

Double plates are available in various length.

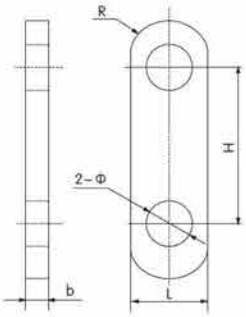


Clevis

HE Code	Dimensions(mm)				Specified failure load (kN)	Weight (kg)
	c	b	M	H		
HEPZ-7	20	6	16	70	70	0.6
HEPZ-10	20	8	18	80	70	0.85
HEPZ-12	20	10	22	90	120	1.52
HEPZ-16	22	12	24	100	160	2.42
HEPZ-1630	26	12	24	300	160	4.8
HEPZ-21	30	14	27	120	210	4.09
HEPZ-25	34	16	30	120	250	5.2
HEPZ-30	38	16	36	120	320	4.74
HEPZ-2018	30	14	27	180	200	5.1
HEPZ-2024	30	14	27	240	200	6
HEPZ-2030	30	14	27	300	200	6.9
HEPZ-2036	30	14	27	360	200	7.8
HEPZ-2042	30	14	27	420	200	8.7
HEPZ-2048	30	14	27	480	200	9.7
HEPZ-2054	30	14	27	540	200	10.6
HEPZ-3018	38	16	36	180	300	6.1
HEPZ-3024	38	16	36	240	300	7.3
HEPZ-3030	38	16	36	300	300	8.4
HEPZ-3036	38	16	36	360	300	9.1
HEPZ-3042	38	16	36	420	300	10.9
HEPZ-3048	38	16	36	480	300	12.1
HEPZ-3054	38	16	36	540	300	13.3
HEPZ-5012	40	20	42	120	500	11.2
HEPZ-5024	40	20	42	240	500	14.5
HEPZ-50	40	20	42	200	500	12.5
HEPZ-16G	22	12	24	90	160	2.7
HEPZ-21G	24	12	24	120	210	3.2
HEPZ-32G	32	16	30	120	320	4.2
HEPZ-42G	36	18	36	150	420	9.3

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.

15.5.3 Single Plates



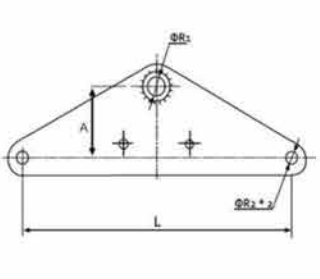
HE Code	Dimensions(mm)					Specified failure load(kN)	Weight (kg)
	Φ	H	b	L	R		
HESP-7	18	70	16	40	22	70	0.57
HESP-10	20	80	16	45	24	100	0.86
HESP-12	24	100	16	50	26	120	1.05
HESP-16	26	100	18	60	32	160	1.28
HESP-20	30	120	26	72	36	200	2.5

Hot-dip galvanized steel

15.5.4 Yoke Plates

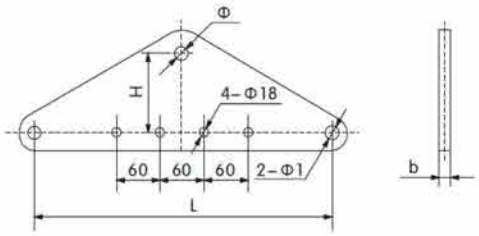
Yoke plates are produced to use on transmission lines and to keep the distance of the bundled conductors at insulator strings and joint the eye-ended parts by compression lugs.
Standard triangular plate has 3 holes only.
Triangular and rectangular plates are available with various hole spacing and thickness to suit either tension or suspension applications.

15.5.4.1 Triangle yoke plates



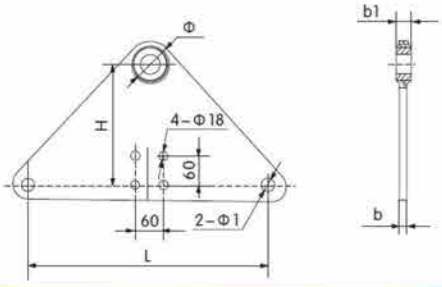
HE Code	Dimensions(mm)						Wt. (kg)	Rated failure load (kN)
	D1	D2	A	L	ΦR1	ΦR2		
YPL-1	16	16	70	400	20	18	4.43	100
YPL-2	16	16	70	400	24	18	4.66	120
YPL-3	18	18	100	400	26	20	5.8	160
YPL-4	18	18	100	400	30	20	6.9	200
YPL-5	16	26	100	520	30	26	8	200
YPL-6	16	26	200	550	30	24	11.8	200
YPL-7	16	30	110	400	33	24	9	250
YPL-8	18	32	110	400	39	26	10	300
YPL-9	24	38	110	550	45	30	24.4	420
YPL-10	30	38	110	400	45	33	14.8	500
YPL-11	32	42	200	150	51	39	25.5	600
YPL-12	32	42	250	500	51	39	23.3	600

Hot-dip galvanized steel.



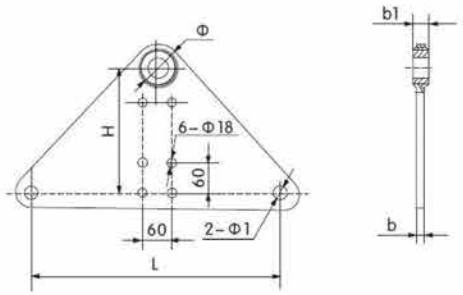
HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	Φ1		
HEL-1645X	110	450	18	26	20	160	6.5
HEL-1650	110	500	22	26	24	160	11.1
HEL-1250G	120	500	16	24	18	120	7.8
HEL-1650G	130	500	18	26	18	160	9.1
HEL-2145G	120	450	20	26	20	210	860
HEL-2150G	130	500	20	26	20	210	10.3

Hot-dip galvanized steel.



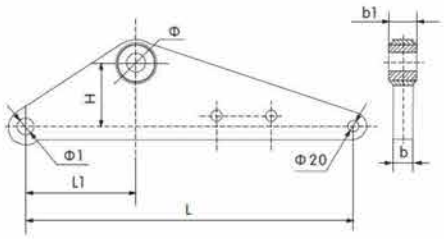
HE Code	Dimensions(mm)						Specified failure load (kN)	Weight (kg)
	H	L	b1	b	Φ	Φ1		
HELX-1025	250	450	16	16	20	18	100	13
HELX-1225	250	450	16	16	24	18	120	13.8
HELX-3225	250	450	28	18	33	26	320	16

Hot-dip galvanized steel.



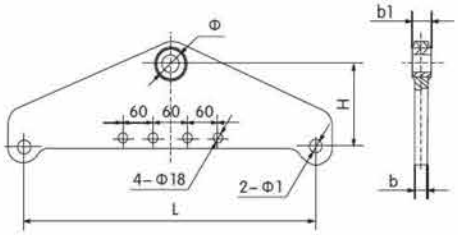
HE Code	Dimensions(mm)						Specified failure load (kN)	Weight (kg)
	H	L	b1	b	Φ	Φ1		
HEL-1045	250	450	16	16	20	20	100	15
HELT-1245	250	450	16	16	24	20	120	11.3
HEL-1645	250	450	26	16	30	20	160	16
HEL-2045	250	450	24	16	30	20	200	19
HEL-3045	250	450	32	18	39	26	300	11
HEL-3050	250	500	32	18	39	26	300	13
HEL-1645G	250	450	18	18	20	20	160	14.9
HEL-2145G	250	450	26	16	30	24	210	13.6
HEL-2150GN	250	500	20	20	26	26	210	21
HEL-3245GN	250	450	28	18	33	26	320	17.6
HEL-4250G	250	500	32	20	39	26	420	22
HEL-5045B	200	450	40	30	45	30	500	17.4

Hot-dip galvanized steel.



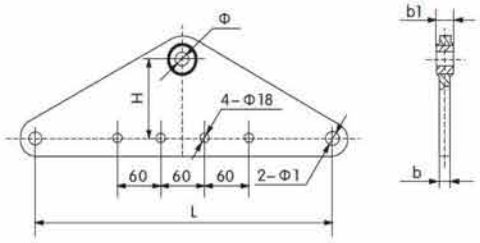
HE Code	Dimensions(mm)							Specified failure load (kN)	Weight (kg)
	H	L	L1	b1	b	Φ	Φ1		
HEL-2060	120	600	200	26	18	30	24	100	13
HEL-3060	140	600	200	32	18	39	30	300	16.7

Hot-dip galvanized steel.



HE Code	Dimensions(mm)						Specified failure load (kN)	Weight (kg)
	H	L	b1	b	Φ	Φ1		
HEL-2545X	150	450	30	22	33	26	250	8.5
HEL-3045G	150	450	32	22	39	26	300	8.8

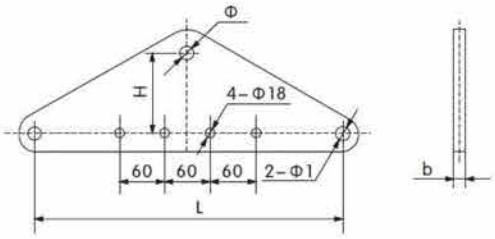
Hot-dip galvanized steel.



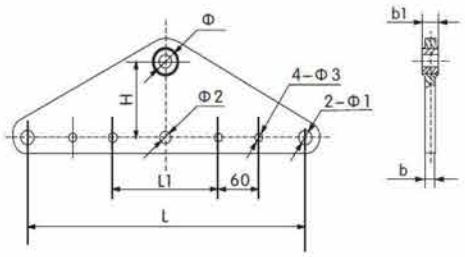
HE Code	Dimensions(mm)						Specified failure load (kN)	Weight (kg)
	H	L	b1	b	Φ	Φ1		
DYP-3045	120	450	32	20	39	26	300	9.8
DYP2-3045G	110	450	32	22	39	26	300	10.5
DYP-4050A	130	450	38	26	39	30	400	16.9
DYP-4250	160	500	38	26	45	30	420	18.1
DYP-3245G	200	450	32	20	39	26	320	18.6
DYP-3250G	130	500	32	18	33	26	320	9.8
DYP-4255S	200	550	32	18	39	26	420	8.4
DYP-3260G	130	600	28	20	33	26	320	8.9
DYP-4250G	200	500	28	18	33	26	420	15.33
DYP-4260G	130	600	32	20	39	26	420	11.4
DYP-6450G	145	500	36	28	45	33	640	17.1
DYP-6460G	145	600	36	28	45	33	640	29.52
DYP-6470G	250	700	36	28	45	33	640	33.24

HE Code	Dimensions(mm)						Specified failure load (kN)	Weight (kg)
	H	L	b1	b	Φ	Φ1		
DYP-21-110-400	110	400	20	16	26	20	210	6.5
DYP-21-120-450	120	450	20	16	26	20	210	7.6
DYP-21-120-500	120	500	20	16	26	20	210	9.3
DYP-21-130-600	130	600	20	16	26	20	210	10.8
DYP-25-110-400	110	400	24	16	30	24	250	7
DYP-25-130-450	130	450	24	16	30	24	250	8.4
DYP-25-130-500	130	500	24	16	30	24	250	9.1
DYP-25-130-600	130	600	24	16	30	24	250	10.6
DYP-32-130-400	130	400	28	18	33	26	320	9.1
DYP-32-130-450	130	450	28	18	33	26	320	10
DYP-32-130-500	130	500	28	18	33	26	320	11
DYP-32-130-600	130	600	28	18	33	26	320	12.8
DYP-42-140-400	140	400	32	20	39	26	420	10.2
DYP-42-140-450	140	450	32	20	39	26	420	11.2
DYP.42-150-500	150	500	32	20	39	26	420	12.6
DYP-42-150-600	150	600	32	20	39	26	420	14.8
DYP-21-25-110-400	110	400	24	16	30	24	250	7
DYP-21-25-130-450	130	450	24	16	30	24	250	8.4
DYP-21-25-130-500	130	500	24	16	30	24	250	9.1
DYP-21-25-130-600	130	600	24	16	30	24	250	10.6
DYP-21-32-130-400	130	400	28	18	33	20	320	8.4
DYP-21-32-130-500	130	500	28	18	33	20	320	11
DYP-21-32-130-600	130	600	28	18	33	20	320	12.8

Hot-dip galvanized steel.

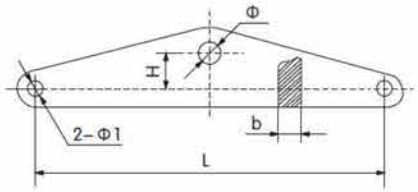


HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	Φ1		
DYP-07-70-400	70	400	16	18	18	70	4.5
DYP-07-70-500	70	500	16	18	18	70	6
DYP-07-70-600	70	600	16	18	18	70	7.2
DYP-10-70-400	70	400	16	20	18	100	4.5
DYP-10-70-500	70	500	16	20	18	100	5.3
DYP-10-100-450	100	450	16	20	18	100	5.8
DYP-10-100-500	100	500	16	20	18	100	6.5
DYP-10-100-600	100	600	16	20	18	100	7.7
DYP-12-70-400	70	400	16	24	18	120	4.7
DYP-12-100-450	100	450	16	24	18	120	5.8
DYP-12-100-500	100	500	16	24	18	120	6.2
DYP-12-100-600	100	600	16	24	18	120	7.7
DYP-16-100-400	100	400	18	26	20	160	5.9
DYP-16-100-450	100	450	18	26	20	160	6.8
DYP-16-100-500	100	500	18	26	20	160	7.4
DYP-16-100-600	100	600	18	26	20	160	8.9
DYPV-10400-1	100	400	16	20	20	100	5.1
DYPV-12400-1	100	400	16	24	24	120	5.8
DYPV-16400-1	120	400	18	26	26	160	7.5



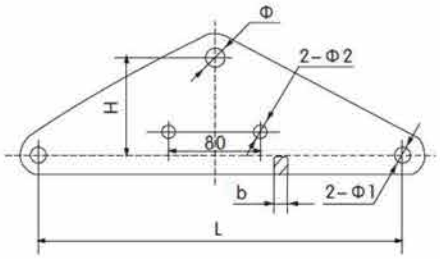
HE Code	Dimensions(mm)									Specified failure load (kN)	Weight (kg)
	H	L	L1	b1	b	Φ	Φ1	Φ2	Φ3		
DYP-1245	100	450	190	16	16	24	20	18	18	120	5
DYP-1650S	130	500	240	18	18	26	20	18	18	160	8.5
DYP-2-1645	100	450	70	22	22	26	20	18	18	160	8.4
DYP-1645G	130	450	130	18	18	26	20	20	18	160	7.8
DYP-2045X	130	450	190	26	18	30	20	20	18	200	7.4
DYP-2045A	130	450	190	26	18	30	20	18	18	200	8
DYP-2145	100	450	190	26	18	30	20	18	28	210	7.8
DYP-2150S	140	500	240	20	20	26	20	20	18	210	10.7
DYP-4045G	175	450	60	38	26	45	30		18	400	13.7

Hot-dip galvanized steel.



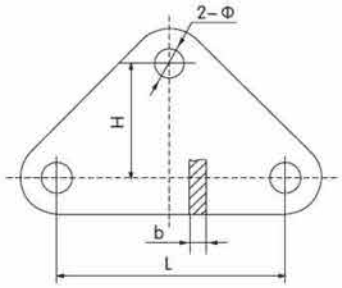
HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	Φ1		
DYP-7	30	544	16	18	18	70	3.7
DYP-3070	160	700	30	39	33	300	22.4

Hot-dip galvanized steel.



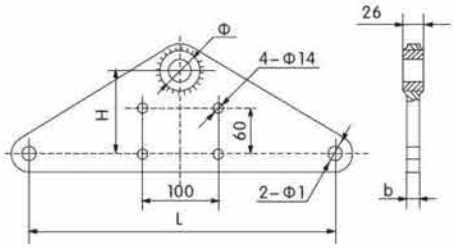
HE Code	Dimensions(mm)						Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	Φ1	Φ2		
YP1-1240	70	400	16	18	18	14	120	3.8

Hot-dip galvanized steel.



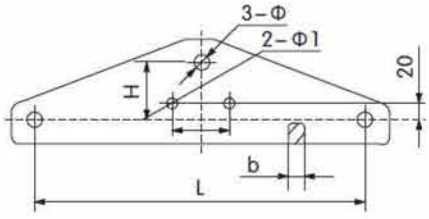
HE Code	Dimensions(mm)				Specified failure load (kN)	Weight (kg)
	H	L	b	Φ		
YP1-1612	100	120	18	26	160	2.5
YP1-1620	60	200	18	26	160	3

Hot-dip galvanized steel.



HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	Φ1		
YP1-2040	100	400	16	30	20	120	3.8

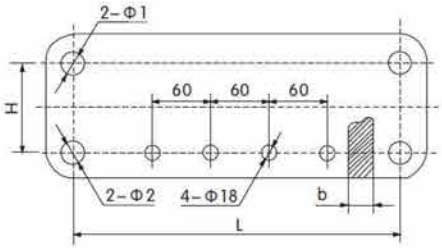
Hot-dip galvanized steel.



HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	Φ1		
YPB-12	95	400	16	18	14	120	9.3

Hot-dip galvanized steel.

15.5.4.2 Square yoke plates

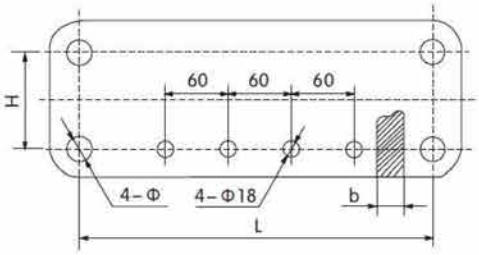


HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ1	Φ2		
SYP-3045A	110	450	18	26	26	300	12
SYP-4045A	110	450	22	32	30	400	17
SYP-6045A	120	450	32	39	39	600	28

Hot-dip galvanized steel.

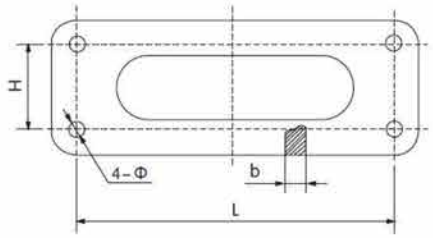
HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ1	Φ2		
SYP-10400-2	100	400	16	20	20	100	8.1
SYP-10500-2	100	500	16	20	20	100	8.3
SYP-10600-2	100	600	16	20	20	100	8.6
SYP-12400-2	100	400	16	24	20	120	8.9
SYP-12500-2	100	500	16	24	20	120	10.9
SYP-12600-2	100	600	16	24	20	120	12.9
SYP-16400-2	120	400	18	26	20	160	11.6
SYP-16500-2	120	500	18	26	20	160	14.2
SYP-16600-2	120	600	18	26	20	160	16.8

Hot-dip galvanized steel.



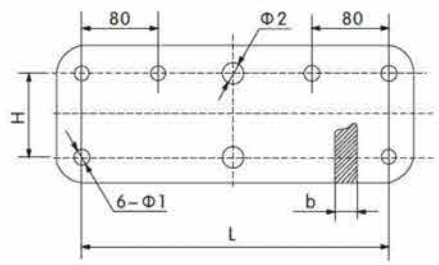
HE Code	Dimensions(mm)				Specified failure load (kN)	Weigh t (kg)
	H	L	b	Φ		
SYP-21-110-400	110	400	16	20	210	8.9
SYP-21-120-450	120	450	16	20	210	10.5
SYP-21-120-500	120	500	16	20	210	12.2
SYP-21-120-600	120	600	16	20	210	14.2
SYP-25-120-400	120	400	16	24	250	10
SYP-25-120-450	120	450	16	24	250	11.5
SYP-25-120-500	120	500	16	24	250	12.3
SYP-25-120-600	120	600	16	24	250	14.5
SYP-32-120-400	120	400	18	26	320	11.6
SYP-32-120-500	120	500	18	26	320	14.2
SYP-32-120-600	120	600	18	26	320	16.7
SYP-42-120-500	120	500	20	26	420	15.8
SYP-42.120-600	120	600	20	26	420	18.6
SYP-64-120-450	120	450	28	33	640	22

Hot-dip galvanized steel.



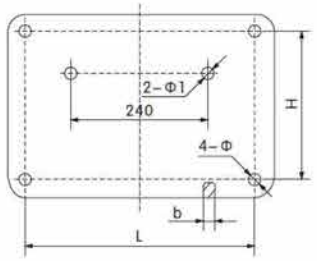
HE Code	Dimensions(mm)				Specified failure load (kN)	Weigh t (kg)
	H	L	b	Φ		
SYP-2140	70	400	16	20	210	5.5
SYP-2540	110	400	16	24	250	11
SYP-3040	120	400	18	26	300	11.2
SYP-4055	190	550	26	30	400	26.6

Hot-dip galvanized steel.



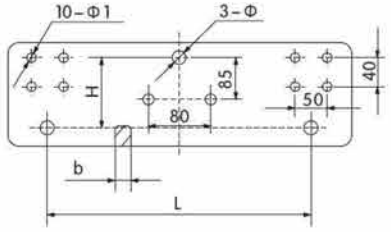
HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ1	Φ2		
SYP-1040	70	400	16	18	20	100	6.5
SYP-1240	70	400	16	18	24	120	6.45
SYP-1640	100	400	18	20	26	160	9.54

Hot-dip galvanized steel.



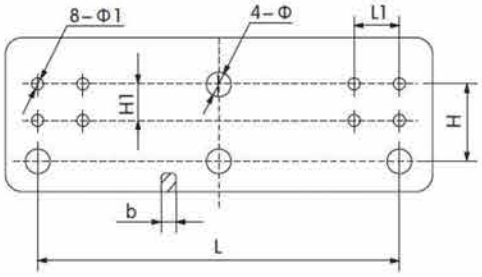
HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	Φ1		
YPB-1240	250	400	16	18	24	120	17

Hot-dip galvanized steel.



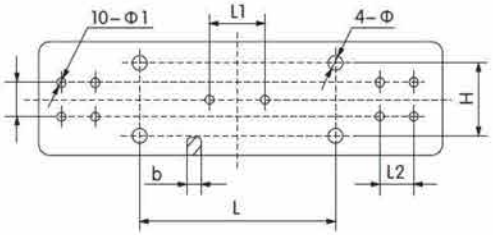
HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	Φ1		
YPS-12	95	400	16	18	14	120	9.3

Hot-dip galvanized steel.



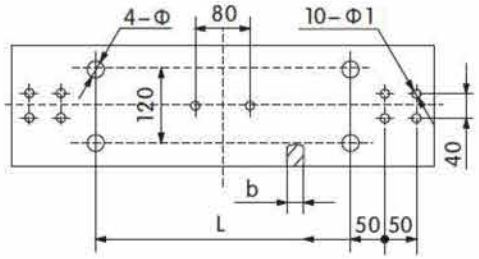
HE Code	Dimensions(mm)							Specified failure load (kN)	Weight (kg)
	H	H1	L	L1	b	Φ	Φ1		
YPX-1640F	80	40	400	50	18	26	14	160	17.6

Hot-dip galvanized steel.



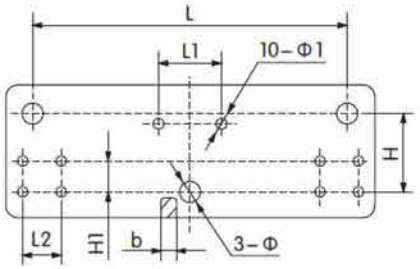
HE Code	Dimensions(mm)								Specified failure load (kN)	Weight (kg)
	H	H1	L	L1	L2	b	Φ	Φ1		
YPFB-3045	120	40	450	80	50	22	26	14	300	20.3

Hot-dip galvanized steel.



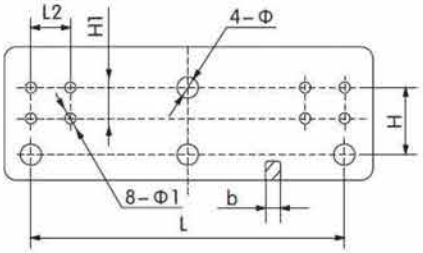
HE Code	Dimensions(mm)				Specified failure load (kN)	Weight (kg)
	L	b	Φ	Φ1		
YPN-20	400	18	26	14	300	17.6

Hot-dip galvanized steel.



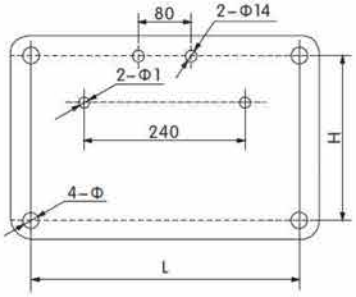
HE Code	Dimensions(mm)								Specified failure load (kN)	Weight (kg)
	H	H1	L	L1	L2	b	Φ	Φ1		
YPSF-16	100	40	400	80	50	22	26	14	160	10
YPSF-30	120	40	400	80	50	22	26	14	300	20.3

Hot-dip galvanized steel.



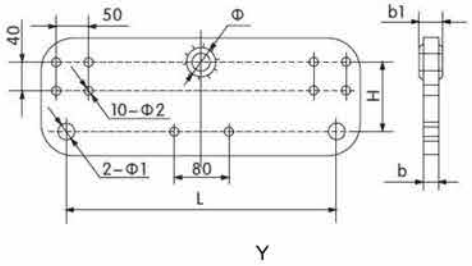
HE Code	Dimensions(mm)								Specified failure load (kN)	Weight (kg)
	H	H1	L	L1	L2	b	Φ	Φ1		
YPSF-1640	100	40	400		50	22	26	14	160	12.3

Hot-dip galvanized steel.

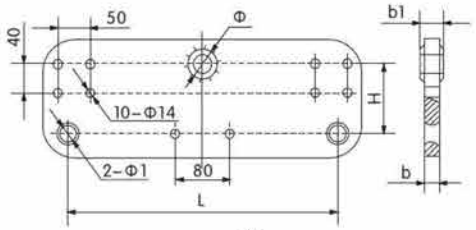


HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	Φ1		
YPRC-1240	250	400	16	18	24	120	17
YPRC-3040	120	400	22	26	24	300	10

Hot-dip galvanized steel.



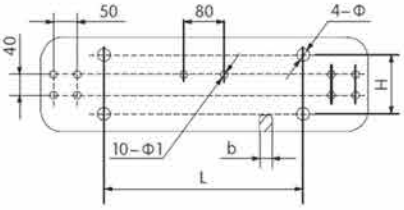
Y



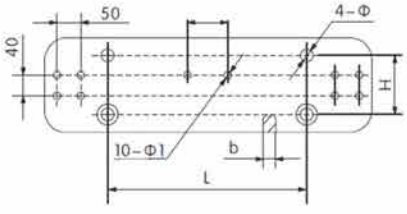
Y

HE Code	Dimensions(mm)						Specified failure load (kN)	Weight (kg)
	H	L	b1	b	Φ	Φ1		
YPBD-0740	95	400		16	18	18	70	9
YPBD-1240	95	400		16	24	18	120	9
YPBD-1640	100	400		18	26	26	160	12.5
YPBD-2040	100	400	26	18	30	26	200	13
YPBD-3040	120	400	32	22	39	26	300	16
YPBD-0740R	95	400		16	18	18	70	9
YPBD-1240R	95	400		16	24	18	120	9
YPBD-1640R	100	400		18	26	26	160	12.5
YPBD-2040R	100	400	26	18	30	26	200	13
YPBD-3040R	120	400	32	22	39	26	300	16

Hot-dip galvanized steel.



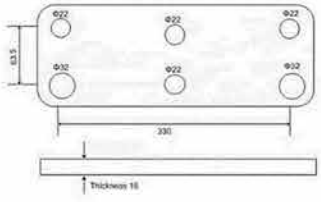
Y



Y

HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	Φ1		
YPBL-3040	120	400	22	26	14	300	21
YPBL-3040R	120	400	22	26	14	300	21

Hot-dip galvanized steel.

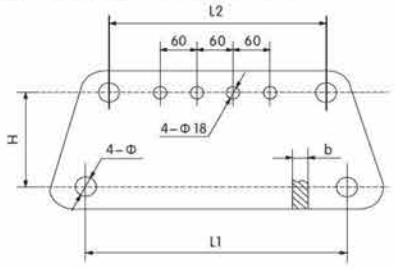


HE Code	Description	Wt. kg	Rated ultimate strength (lbs)
YPT-1	Rectangular plate	20	3000

Eye according to IEC 471.

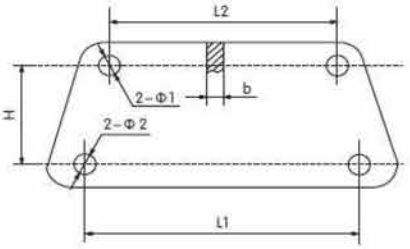
Material steel is hot dip galvanized.

15.5.4.3 Keystone yoke plates



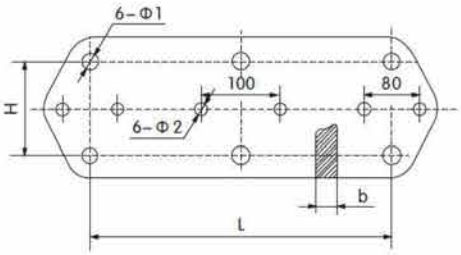
HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L1	L2	b	Φ		
SYP-10-80-400-340	80	400	340	16	20	100	6.1
SYP-64-120-500-450	120	500	450	28	33	640	23.5
SYP-64-120-600-450	120	600	450	28	33	640	26

Hot-dip galvanized steel.



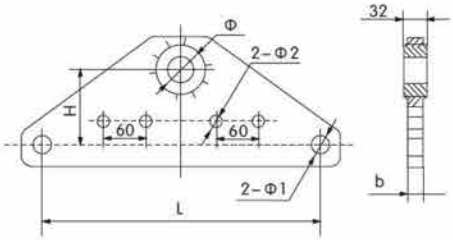
HE Code	Dimensions(mm)						Specified failure load (kN)	Weight (kg)
	H	L1	L2	b	Φ1	Φ2		
TYP-1212	65	400	120	16	20	18	120	5
TYP-1221	65	400	210	16	20	18	120	5.35
TYP-1225	65	400	250	16	20	18	120	5.54
TYP-1229	65	400	290	16	20	18	120	5.73
TYP-1233	65	400	330	16	20	18	120	5.92
TYP-1237	65	400	370	16	20	18	120	6.11
TYP-1255	65	400	550	16	20	18	120	8.66
TYP-305045	130	450	500	32	39	39	300	29.59
TYP-425550	150	500	550	20	26	26	420	17.56
TYP-845550	150	500	550	32	39	39	840	32.12

Hot-dip galvanized steel.



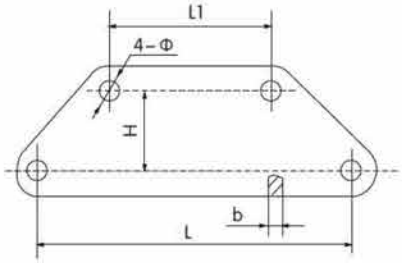
HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ1	Φ2		
KYP-2540	120	400	16	24	18	250	11.1
KYP-3034	120	400	18	26	18	400	13.57

Hot-dip galvanized steel.



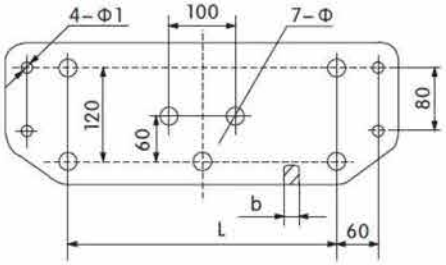
HE Code	Dimensions(mm)						Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	Φ1	Φ2		
YP1-3040	110	400	22	39	26	18	300	13

Hot-dip galvanized steel.



HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	b	Φ	L1		
YP1-1640	100	400	18	18	200	120	3.8

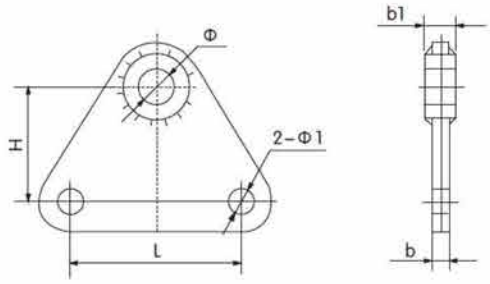
Hot-dip galvanized steel.



HE Code	Dimensions(mm)				Specified failure load (kN)	Weight (kg)
	L	b	Φ	Φ1		
YPH-3040	400	22	26	14	300	16.9

Hot-dip galvanized steel.

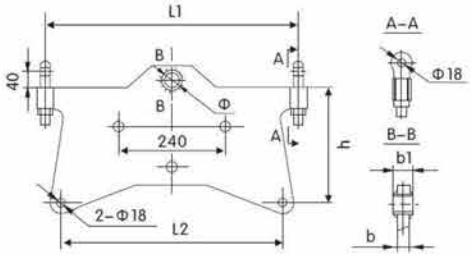
15.5.4.4 Yoke plates for double guy wire



HE Code	Dimensions(mm)						Specified failure load (kN)	Weight (kg)
	H	L	b1	b	Φ	Φ1		
TYP-1012	60	120	16	16	20	20	100	1.8
TYP-1212D	90	120	16	16	24	20	120	2.3
TYP-1620	100	200	18	18	26	26	160	3.4
TYP-2115	100	150	26	16	30	24	210	2.5
TYP-2518	100	180	30	16	33	24	250	2.7
TYP-3014	120	140	26	18	39	26	300	4.6
TYP-3016	120	160	26	18	39	26	300	5.4
TYP-3018	120	180	26	18	39	26	300	5.9
TYP-4025	150	250	36	24	45	30	400	9.5
TYP-5020	150	200	38	30	45	33	500	8.2

Hot-dip galvanized steel.

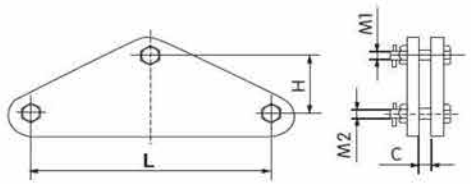
15.5.4.5 Yoke Plates(Type YPLK)



HE Code	Dimensions(mm)						Specified failure load (kN)	Weight (kg)
	b	b1	h	L1	L2	Φ		
YPLK-0745	16	16	220	450	450	18	70	17.5
YPLK-0745G	16	16	245	450	450	20	70	17.2
YPLK-0750	16	16	230	500	450	18	70	17.2
YPLK-1045	18	18	230	450	450	26	100	20.5
YPLK-1645	18	18	225	470	450	20	160	20.5
YPLK-164745	16	16	195	450	450	26	160	18
YPLK-1645G	18	20	245	550	500	26	160	18.9
YPLK-1650S	18	18	195	450	450	26	160	16.5
YPLK-214945	20	20	245	500	450	26	210	22.3
YPLK-215550S	20	20	245	550	500	26	210	20.5
YPLK-3245G	18	28	235	450	450	33	320	18.8
YPLK-3250G	18	28	245	500	500	33	320	20.5

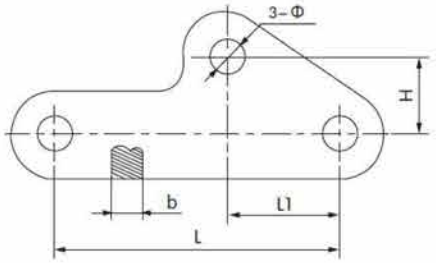
Hot-dip galvanized steel.

15.5.4.6 Double yoke plates



HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	H	L	C	M1	M2		
DYP-1240S	180	400	18	20	16	120	6
DYP-1640S	100	400	22	24	16	160	7.3
DYP-2040S	110	400	26	27	18	200	8.9
DYP-12457S	80	457	18	20	16	120	6.4
DYP-16457S	100	457	22	24	16	160	7.6
DYP-20457S	110	457	26	27	18	200	9.4

15.5.5 Towing plates



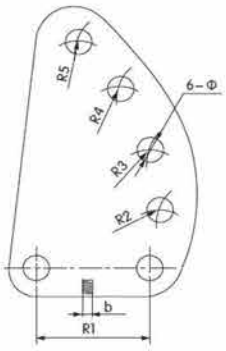
HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	L	L1	H	Φ	b		
HETP-07100	100	38	22	18	16	70	0.8
HETP-10120	120	42	25	20	16	100	1.1
HETP-12150	150	52	30	24	16	120	1.9
HETP-16180	180	55	35	26	18	160	2.6
HETP-32240	240	95	57	33	28	320	6.23

Hot-dip galvanized steel

HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	L	L1	H	Φ	b		
HETP-7	100	38	22	18	16	70	0.8
HETP-10	120	42	25	20	16	100	1.1
HETP-12	150	52	30	24	16	120	1.9
HETP-16	180	55	35	26	18	160	2.6
HETP-20	200	75	45	30	26	200	4.7
HETP-50	260	100	70	45	45	500	15.4
HETP-60	260	114	80	51	42	600	16
HETP-21S	200	75	45	26	20	210	3.6
HETP-25G	220	95	57	33	22	250	3
HETP-32G	240	95	57	33	28	320	6.23
HETP-30	240	95	57	39	32	300	7.3
HETP-42G	260	100	70	39	32	420	6.5
HETP-5026	260	120	75	45	38	500	13
HETP-5036	360	120	70	45	38	500	13.4

Hot-dip galvanized steel.

15.5.6 Adjuster plates



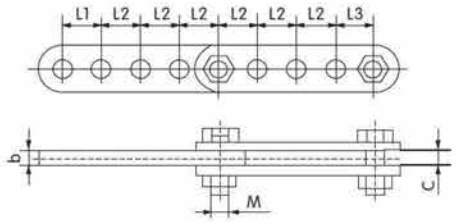
HE Code	Dimensions(mm)							Specified failure load (kN)	Weight (kg)
	R1	R2	R3	R4	R5	Φ	b		
HEAP-1	70	95	120	145	170	18	16	70	1.7
HEAP-2	80	110	140	170	200	20	16	100	2.7
HEAP-3	100	135	170	205	240	24	16	120	3.2
HEAP-4	110	125	140	155	170	26	18	160	4.1
HEAP-5	120	135	150	165	180	26	20	210	7.4
HEAP-6	120	140	160	180	200	33	38	320	9.2

Hot-dip galvanized steel.

HE Code	Dimensions(mm)							Specified failure load (kN)	Weight (kg)
	R1	R2	R3	R4	R5	Φ	b		
HEAP-7	70	95	120	145	170	18	16	70	1.7
HEAP-8	80	110	140	170	200	20	16	100	2.7
HEAP-9	100	135	170	205	240	24	16	120	3.2
HEAP-10	110	125	140	155	170	26	18	160	4.1
HEAP-11	120	135	150	165	180	26	20	210	7.4
HEAP-12	120	140	160	180	200	33	30	250	11.5
HEAP-13	120	140	160	180	200	39	32	300	12.5
HEAP-14	135	160	185	210	235	51	42	600	21.6
HEAP-15	140	165	190	215	240	45	38	500	18.5
HEAP-16	140	185	230	275	320	45	38	500	14.4
HEAP-17	120	135	150	165	180	26	20	210	6.2
HEAP-18	120	140	160	180	200	33	38	320	9.2

Hot-dip galvanized steel.

15.5.7 Adjuster plates



HE Code	Dimensions(mm)							Specified failure load (kN)	Weight (kg)
	b	C	L1	L2	L3	Φ	M		
HAPL-1	16	20	60	45	45	18	16	70	2
HAPL-2	16	20	65	50	50	20	18	100	2.9
HAPL-3	16	20	75	60	75	24	22	120	5.2
HAPL-4	18	22	80	70	80	26	24	160	7
HAPL-5	20	24	80	70	80	26	24	210	8.4
HAPL-6	28	32	90	80	90	33	30	320	15.2

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.

HE Code	Dimensions(mm)							Specified failure load (kN)	Weight (kg)
	b	C	L1	L2	L3	Φ	M		
HAPL-7	16	20	60	45	45	18	16	70	2
HAPL-8	16	20	65	50	50	20	18	100	2.9
HAPL-9	16	20	75	60	75	24	22	120	5.2
HAPL-10	18	22	80	70	80	26	24	160	7
HAPL-11	26	30	70	70	90	30	27	210	10.14
HAPL-12	32	38	80	80	100	39	36	300	14
HAPL-13	38	40	160	160	80	45	42	500	24.6
HAPL-14	42	44	180	180	90	51	48	600	31.6

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.

15.6 Padlock

The pad lock is designed to fix tube or bar as a lock device, with nuts inside tube, which needs special tool to turn the

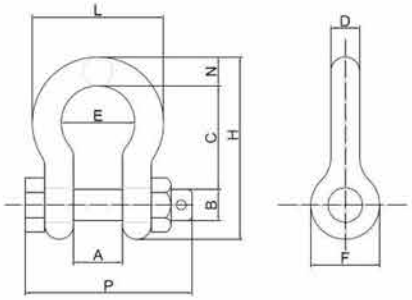
HE Code	Dimensions			Wt. kg	Ultimate strength lbs
	L	W	ΦD		
HEPL-1001	2 1/4″	1″	1/2″	0.186	20000

Raw material: ASTM A36 steel
Finish: hot dip galvanized

15.7 Shackles

15.7.1 Anchor Shackles

Anchor shackles are produced usually to attach suspension insulator stings to poles.
Shackles also can be used to suspend aluminum sheaves in conjunction with twin grips.

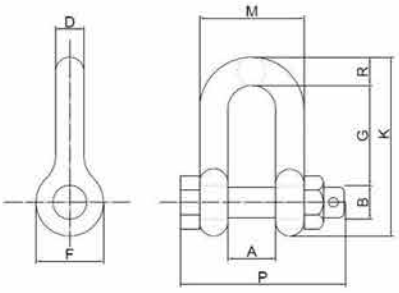


Body – Galvanized forged steel
Bolt – Galvanized steel
Split pin – Stainless steel

HE Code	Size (in)	WLL (t)	Dimensions										Weight (lbs)
			A	B	C	D	E	F	H	L	N	P	
HEAS-1	3/16	1/3	9.65	6.35	22.35	4.83	15.24	14.22	37.34	24.89	4.83	32.77	0.06
HEAS-2	1/4	1/2	11.94	7.87	28.70	6.35	19.81	15.49	46.74	32.51	6.35	39.62	0.17
HEAS-3	5/16	3/4	13.46	9.65	30.99	7.87	21.34	19.05	53.09	37.34	7.87	46.23	0.22
HEAS-4	3/8	1	16.76	11.18	36.58	9.65	26.16	23.11	63.25	45.21	9.65	55.12	0.33
HEAS-5	7/16	1 1/2	19.05	12.70	42.93	11.18	29.46	26.92	73.91	51.56	11.18	63.75	0.49
HEAS-6	1/2	2	20.57	16.00	47.75	12.70	33.27	30.23	83.31	58.67	12.70	71.12	0.79
HEAS-7	5/8	3 1/4	26.92	19.05	60.45	16.00	42.93	38.10	106.43	74.68	17.53	89.66	1.68
HEAS-8	3/4	4 3/4	31.75	22.35	71.37	19.05	50.80	45.97	126.24	88.90	20.57	103.38	2.72
HEAS-9	7/8	6 1/2	36.58	25.40	84.07	22.35	57.91	53.09	148.08	102.36	24.64	105.92	3.95
HEAS-10	1	8 1/2	42.93	28.70	95.25	25.40	68.33	60.45	166.62	125.98	26.92	134.87	6.12
HEAS-11	1 1/8	9 1/2	45.97	31.75	107.95	28.70	73.91	68.33	189.74	131.06	31.75	129.29	8.27
HEAS-12	1 1/4	12	51.56	35.05	119.13	31.75	82.55	76.20	209.55	146.05	35.05	165.35	11.71
HEAS-13	1 3/8	13 1/2	57.15	38.10	133.35	35.05	92.20	84.07	232.66	162.05	38.10	183.13	15.83
HEAS-14	1 1/2	17	60.45	41.40	146.05	38.10	98.55	92.20	254.00	174.75	41.15	196.34	20.8
HEAS-15	1 3/4	25	73.15	50.80	177.80	44.45	127.00	106.43	313.44	225.04	57.15	229.87	33.91
HEAS-16	2	35	82.55	57.15	196.85	50.80	146.05	123.19	347.47	253.24	60.96	264.41	52.25
HEAS-17	2 1/2	55	104.90	69.85	266.70	66.55	184.15	144.53	453.14	326.90	79.50	344.42	98.25
HEAS-18	3	85	127.00	82.55	330.20	76.20	200.15	165.10	546.10	364.74	91.95	419.10	154
HEAS-19	3 1/2	120	133.35	95.25	371.60	91.95	228.60	203.20	625.60	419.10	104.65	482.60	265
HEAS-20	4	150	139.70	107.95	368.30	104.14	254.00	228.60	652.53	460.25	115.82	501.65	338

15.7.2 Chain Shakles

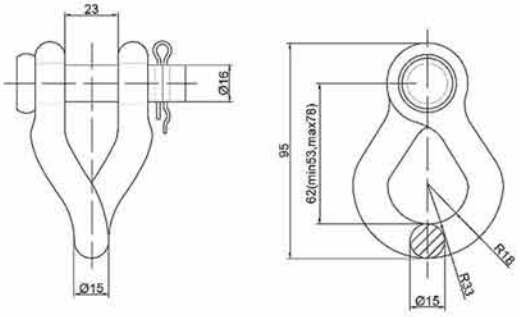
Chain shackles are produced to attach suspension insulators or anchors to suspension and tension towers, yokes or double arming plates. Openings are enlarged to permit the use of more fittings.



HE Code	Size (in)	WLL (t)	Dimensions							Weight (lbs)
			A	B	G	K	M	P	R	
HECS-1	3/16	1/3	9.65	6.35	—	—	—	32.77	—	—
HECS-2	1/4	1/2	11.94	7.87	—	—	—	39.62	—	0.13
HECS-3	5/16	3/4	13.46	9.65	—	—	—	46.23	—	0.23
HECS-4	3/8	1	16.76	11.18	—	—	—	55.12	—	0.33
HECS-5	7/16	1 1/2	19.05	12.70	—	—	—	63.75	—	0.49
HECS-6	1/2	2	20.57	16.00	41.40	76.96	45.97	71.12	12.70	0.75
HECS-7	5/8	3 1/4	26.92	19.05	50.80	95.25	58.67	89.66	16.00	1.47
HECS-8	3/4	4 3/4	31.75	22.35	60.45	115.06	69.85	103.38	20.57	2.58
HECS-9	7/8	6 1/2	36.58	25.40	71.37	135.38	81.03	105.92	24.64	3.85
HECS-10	1	8 1/2	42.93	28.70	81.03	150.88	93.73	134.87	25.40	5.55
HECS-11	1 1/8	9 1/2	45.97	31.75	90.93	172.21	103.12	129.29	31.75	7.6
HECS-12	1 1/4	12	51.56	35.05	100.08	190.50	115.06	165.35	35.05	10.81
HECS-13	1 3/8	13 1/2	57.15	38.10	111.25	210.31	127.00	183.13	38.10	13.75
HECS-14	1 1/2	17	60.45	41.40	122.17	230.12	136.65	196.34	41.15	18.5
HECS-15	1 3/4	25	73.15	50.80	146.05	278.64	162.05	229.87	53.85	31.4
HECS-16	2	35	82.55	57.15	171.45	311.91	184.15	264.41	50.80	46.75
HECS-17	2 1/2	55	104.90	69.85	203.20	376.94	238.25	344.42	66.55	85
HECS-18	3	85	127.00	82.55	215.90	428.75	279.40	419.10	88.90	124.25
HECS-19	3 1/2	120	133.35	95.25	—	—	—	482.60	—	—
HECS-20	4	150	139.70	107.95	—	—		501.65	—	—

Casted iron products, constructed of high quality steel ASTM A536 hot dip galvanized to ASTM A-153, assembled with split pin.

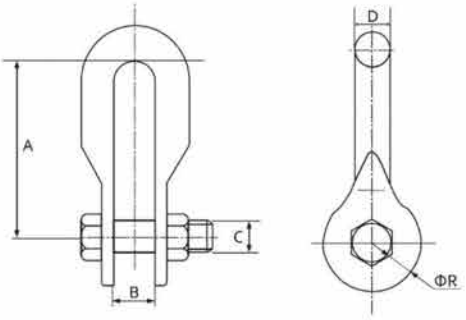
15.7.3 Twisted Shackles



HE Code: HEGR-16
Technical requirements:
1. The unit of dimension marked on the drawing is millimeter (mm).
2. Unmarked dimension tolerance: refer to GB/T 1804-2000 V-level standard
3. Minimum breaking load: 135KN

15.7.4 U Shackles

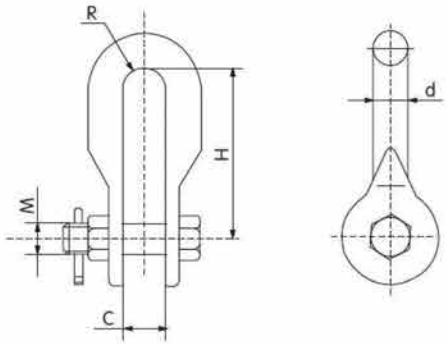
U shackle is a U-shaped piece of metal structure used to be secured with a clevis pin or bolt across the opening.



1, U Shackles

HE Code	Dimensions(mm)					Strength load	Wt.
	B	D	C	ΦR	A	KN	kg
US-7	20	16	16	22	80	70	0.52
US-10	22	18	18	24	85	100	0.73
US-12	24	20	22	30	90	120	1.01
US-16	26	22	24	32	95	160	1.4
US-21	30	24	27	36	100	210	2.12
US-25	34	26	30	40	110	250	3
US-30	38	30	36	46	130	300	4.33
US-50	44	36	42	55	150	500	7

Raw material: ASTM A536
Finish: hot dip galvanized

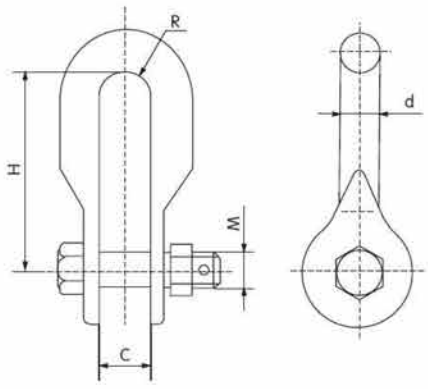


HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	C	M	d	H	R		
HEUT-0770	20	16	16	70	10	70	0.5
HEUT-1085	20	18	16	85	10	100	0.6
HEUT-1290	22	22	18	90	11	120	1
HEUT-1695	24	24	20	95	12	160	1.5
HEUT-21100	24	24	20	100	12	210	1.8
HEUT-25110	28	27	24	110	14	250	2.1
HEUT-32115	32	30	28	115	16	320	3
HEUT-42140	36	36	32	140	18	420	4.5
HEUT-50150	36	36	32	150	18	500	4.9
HEUT-1290T	22	22	18	90	11	120	1
HEUT-0770	24	16	16	70	12	70	0.5
HEUT-1085	26	18	16	85	13	100	0.6
HEUT-1290	26	22	18	90	13	120	1
HEUT-1690	28	24	20	90	14	160	1.5
HEUT-21100	30	24	20	100	15	210	1.8
HEUT-32130	36	30	28	130	18	320	3.4
HEUT-0770T	28	16	16	70	12	70	0.5
HEUT-1290T	28	22	18	90	13	120	1.1

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.

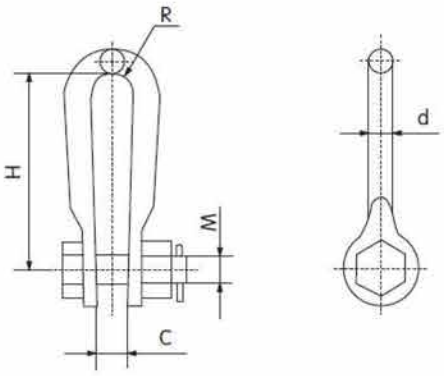
HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	C	M	d	H	R		
HEUT-4	20	12-16	12.5	65	10	40	0.21
HEUT-7	20	16	16	80	10	70	0.6
HEUT-10	22	18	18	85	11	100	0.7
HEUT-12	24	22	20	90	12	120	1
HEUT-16	26	24	22	95	13	160	1.5
HEUT-21	30	27	24	100	15	210	2.2
HEUT-25	34	30	24	110	17	250	2.7
HEUT-30	38	36	30	130	19	300	3.7
HEUT-50	44	42	36	150	22	500	3.6

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.



HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	C	M	d	H	R		
HEUG-7	20	16	16	60	10	70	0.5
HEUG-10	22	18	18	70	11	100	0.54
HEUG-12	24	22	20	80	12	120	0.96
HEUG-16	26	24	22	90	13	160	1.47
HEUG-20	30	27	24	100	15	200	2.2
HEUG-25	34	30	26	110	17	250	2.79
HEUG-30	38	36	30	130	19	300	3.7
HEUG-40	42	42	36	150	21	400	7
HEUG-50	44	42	36	150	22	500	7

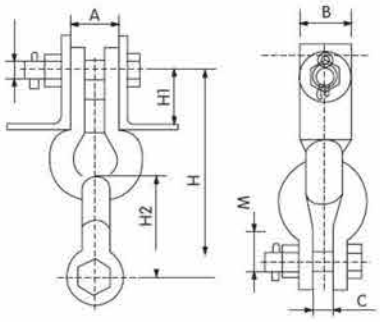
The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.



2, HEUP type hanging ring pull

HE Code	Dimensions(mm)					Specified failure load (kN)	Weight (kg)
	C	M	d	H	R		
HEUP-7	20	16	16	120	15	70	0.65
HEUP-10	22	18	18	140	17	100	0.92
HEUP-12	24	22	20	140	18	120	1.43
HEUP-16	26	24	22	140	19	160	1.78
HEUP-21	30	27	24	160	18	210	2.6
HEUP-25	34	30	26	170	25	250	3.5
HEUP-30	38	36	30	170	20	300	4.83

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.



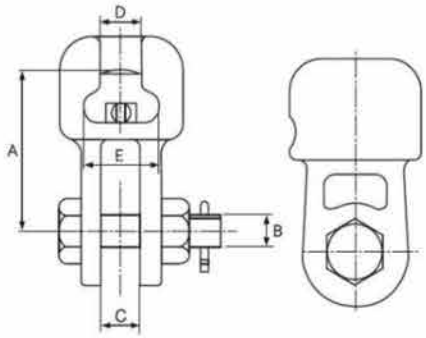
3, Strengthened Shackle

HE Code	Dimensions(mm)							Specified failure load (kN)
	C	M	H	H1	H2	A	B	
HEUJ-16	30	24	195	75	87	60	60	160
HEUJ-20	30	27	230	75	110	60	60	200
HEUJ-40	44	42	323	125	120	70	108	400

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.

15.8 Socket Tongues

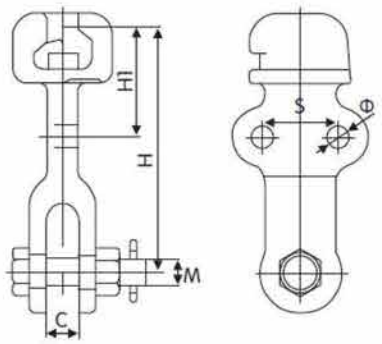
15.8.1 Socket Clevis



1, Socket Clevis

HE Code	Dimensions					Designated size of coupling	Wt. (kg)	Rated failure load (KN)
	C	D	C2	B	A			
WS-7	18	19.2	34.5	16	70	16	0.97	70
WS-10	20	19.2	34.5	18	85	16	1.7	100
WS-12G	20	19.2	34.5	18	85	16	1.7	120
WS-12	24	23	42.5	22	90	20	3.81	120
WS-12X	24	19.2	34.5	22	90	16	3.1	120
WS-12A	20	19.2	34.5	22	85	16	1.8	120
WS-16	26	23	42.5	24	95	20	2.64	160
WS-20	30	27.5	51	27	100	24	4.3	200
WS-20DF	30	23	42.5	27	100	20	4.5	200
WS-30	36	27.5	51	36	110	24	5.7	300
WS-16G	22	23	42.5	24	95	20	2.64	160
WS-21G	24	27.5	51	24	100	24	3.5	210
WS-32G	32	27.5	51	30	110	24	4.8	320
WS-42G	36	32	59	36	120	28	5.6	420

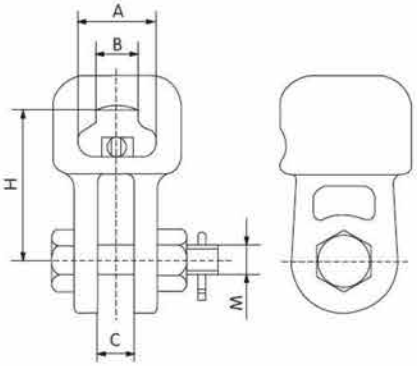
Galvanized forged steel for body .Copper for W clip. Stainless steel for split pin.
Socket according to AS 1154.1 : 2004 or IEC 120.
Eye according to IEC 471.
Split pin according to IEC 372.



2, Socket Clevis

HE Code	Dimensions(mm)						Designated size of coupling	Specified failure load (kN)	Weight (kg)
	b	H	H1	Φ	Φ1	S			
WCT-1	20	16	13	145	65	45	16	70	1.9
WCT-2	20	18	13	145	65	45	16	100	2
WCT-3	20	22	13	160	70	45	16	120	2.2

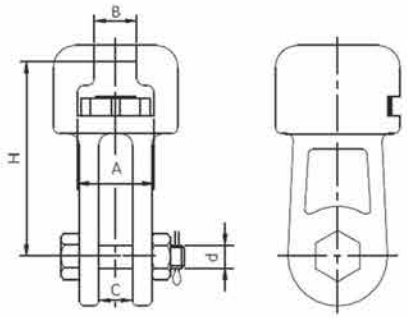
Hot-dip galvanized steel.



3, Socket Clevis

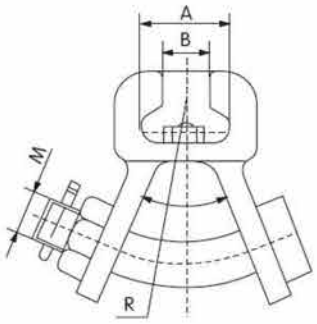
HE Code	Dimensions(mm)					Designated size of coupling	Specified failure load (kN)	Weight (kg)
	C	H	M	A	B			
WCS-7	20	70	16	34.5	19.2	16	70	0.97
WCS-10	20	85	18	34.5	19.2	16	100	1.7
WCS-12G	20	90	22	34.5	19.2	16	120	1.7
WCS-12	24	85	22	34.5	19.2	16	120	3.81
WCS-12X	24	90	22	34.5	19.2	16	120	3.1
WCS-12A	20	85	22	34.5	19.2	16	120	1.8
WCS-16	22	95	24	42.5	23	20	160	2.6
WCS-21	24	100	24	42.5	23	20	210	4.3
WCS-20DF	30	100	30	42.5	23	20	200	3.6
WCS-30	32	110	30	51	27.5	24	320	2.64
WCS-16G	22	95	24	42.5	23	20	160	5.2
WCS-21G	24	100	24	51	27.5	24	210	3.5
WCS-32G	32	110	30	51	27.5	24	320	4.8
WCS-42G	36	120	36	59	32	28	420	5.6

The socket-clevis eye are malleable iron or casting steel. These curity clips are stainless steel, cotter pins are stainless, ferrous parts are Hot-dip galvanized.



4, Socket Clevis

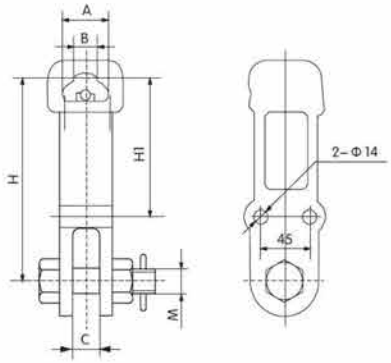
HE Code	Dimensions(mm)					Specified failure load(kN)	Weight (kg)
	C	B	A	d	H		
WHS-7	18	19.2	34.5	16	70	70	0.97
WHS-10	20	19.2	34.5	18	85	100	1.2
WHS-16	26	23	42.5	24	95	160	2.64
WHS-21R	30	27.5	51	27	100	210	4.3
WHS-30R	38	27.5	51	36	110	300	5.7



5, Socket clevis(Type WYS)

HE Code	Dimensions(mm)				Suitable insulator	Specified failure load(kN)	Weight (kg)
	R	M	A	B			
WYS-21	100	27	42.5	23	20	210	4.1
WYS-30	110	30	51	27.5	24	300	4.9

The socket-clevis eye are malleable iron or casting steel. these curity clips are bronze or stainless steel. cotter pins are stainless. ferrous parts are Hot-dip galvanized.

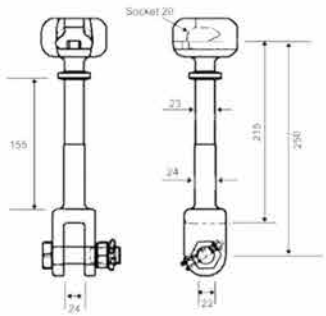


6, Socket clevis

HE Code	Dimensions(mm)						Suitable insulator	Specified failure load(kN)	Weight (kg)
	C	H	M	H1	A	B			
WCE-7AG	18	105	16	51.5	34.5	19.2	16	70	2.1
WCE-16A	26	195	24	135.5	42.5	23	20	160	4.3
WCE-21B	30	195	27	95	42.5	23	20	210	4.7

The socket-clevis eye are malleable iron or casting steel. These curity clips are bronze or stainless steel. cotter pins are stainless. ferrous parts are Hot-dip galvanized.

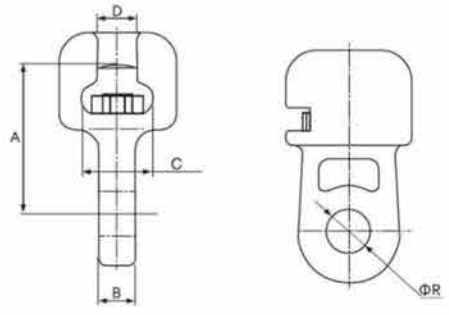
15.8.2 Socket Clevis Extension Links



HE Code	Minimum failing load (Kn)	Socket (MM)	Bolt dia.	Wt. kg
SCL-1	160	20	M20	2

Galvanized forged steel for body.
Copper for W clip.
Stainless steel for split pin.
Standard long socket clevises are assembled with W clip.

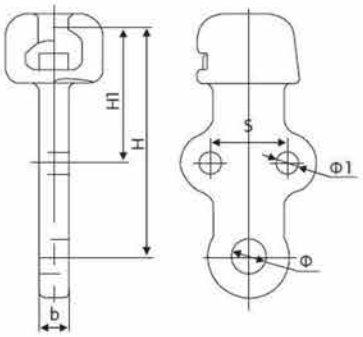
15.8.3 Socket Eyes



1, Socket Eyes

HE Code	Dimensions					Designated size of coupling	Wt. (kg)	Rated failure load (kN)
	A	B	C	D	ΦR			
W-7A	70	16	34.5	19.2	20	16	0.69	70
W-7B	115	16	34.5	19.2	20	16	0.86	70
W1-10	85	18	34.5	19.2	20	16	0.9	100
W1-12	90	20	34.5	19.2	24	16	1.3	120
W-12	90	20	42.5	23	24	20	1.4	120
W-30	110	32	51	27.5	39	24	3.5	300

Galvanized forged steel for body

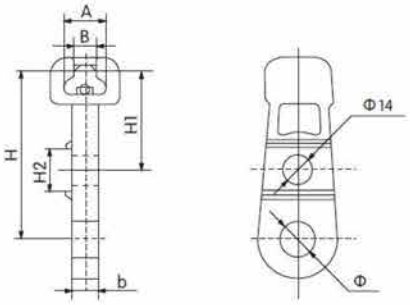


Bronze for W clip. Stainless steel for split pin.

2, Socket Eyes

HE Code	Dimensions(mm)						Designated size of coupling	Specified failure load (kN)	Weight (kg)
	b	H	H1	Φ	Φ1	S			
WJC-07135	16	135	80	20	13	45	16	70	1.5
WJC-10135	16	135	80	20	13	45	16	100	1.5
WJC-12145	16	145	80	24	13	45	16	120	1.6

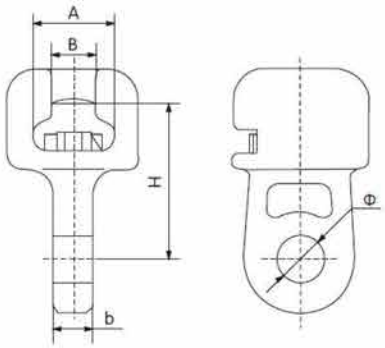
Hot-dip galvanized steel.



3, Socket Eye

HE Code	Dimensions(mm)							Suitable insulator	Specified failure load(kN)	Weight (kg)
	b	H	H1	Ø1	H2	D	D1			
WHC-12	16	145	24	90	27	34.5	19.2	16	120	1.2

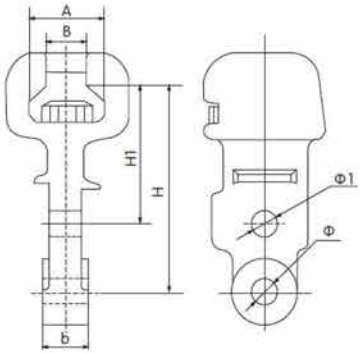
The socket-clevis eye are malleable iron or casting steel. these curity clips are bronze or stainless steel. cotter pins are stainless. ferrous parts are Hot-dip galvanized.



4, Socket Eye

HE Code	Dimensions(mm)					Designated size of coupling	Specified failure load (kN)	Weight (kg)
	Φ	b	H	A	B			
HEW-7A	20	16	70	34.5	19.2	16	70	0.8
HEW-7B	20	16	115	34.5	19.2	16	70	0.92
HEW1-10	20	18	85	34.5	19.2	16	100	0.9
HEW-1085	20	16	85	34.5	19.2	16	100	1.1
HEW-1290	24	16	90	34.5	19.2	16	120	1.3
HEW1-12	24	20	90	34.5	19.2	16	120	1.3
HEW-12L	24	20	90	42.5	23	20	120	1.4
HEW-12S	24	18	85	34.5	19.2	16	120	1.3
HEW-1695	26	18	95	42.5	23	20	160	1.9
HEW-30	39	32	110	51	27.5	24	300	3.5
HEW-32110	39	28	110	51	27.5	24	320	4.2

The socket-clevis eye are malleable iron or casting steel. Ferrous parts are Hot-dip galvanized. These curity clips are stainless steel.



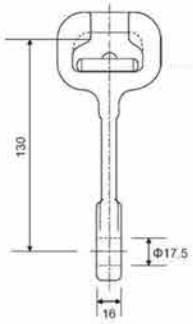
5,

Socket Eye (Type WCK)

HE Code	Dimensions(mm)							Suitable insulator	Specified failure load(kN)	Weight (kg)
	b	H	Φ	H1	Φ1	A	B			
WCK-70	20	110	18	70	14	34.5	19.2	XP-7 XP-4.5	70	1
WCK-120	22	110	24	70	14	34.5	19.2	XP-12	120	1.3

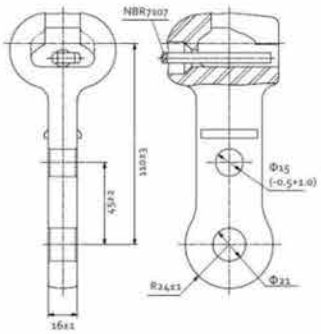
W1-7k socket eye is malleable iron,W1-12k is casting steel,the security clips are bronze or stainless steel.All ferrous parts are Hot-dip galvanized.

15.8.4 Socket Eyes Twisted



Long socket eyes are produced to attach arcing fitting and jointing ball-ended parts with clevis-ended parts at insulator strings.

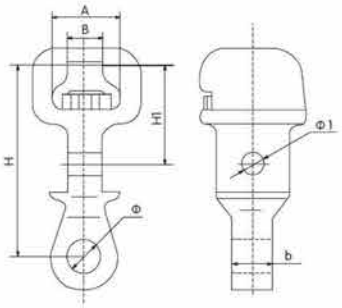
HE Code	Description
SEL-1	Socket eyes extension link



HE Code	Description
SES-1	Straight socket eyes

Material:
Galvanized forged steel for body
Copper for pin inside

Stainless steel for split pin
Socket according to AS 1154.1 : 2004 or IEC 120.
Eye according to IEC 471.
Split pin according to IEC 372.



Socket eyes

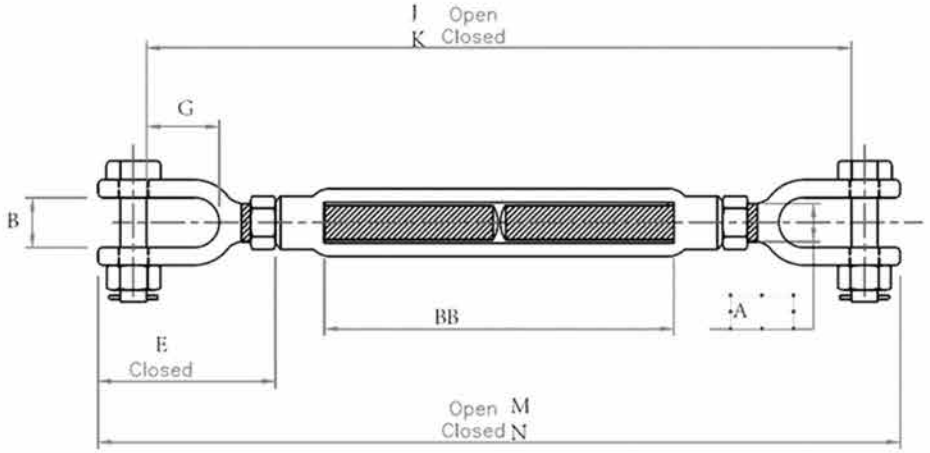
HE Code	Dimensions(mm)							Suitable insulator	Specified failure load(kN)	Weight (kg)
	b	H	Φ	H1	Φ1	A	B			
WRC-70	18	120	18	65	14	34.5	19.2	XP-7 XP-4.5	70	1
WRC-120	22	120	22	70	14	34.5	19.2	XP-12	120	1.3

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

15.9 Turnbuckles

Turnbuckles are produced to adjust the length of the insulator strings and tension of tower auxiliary anchors.

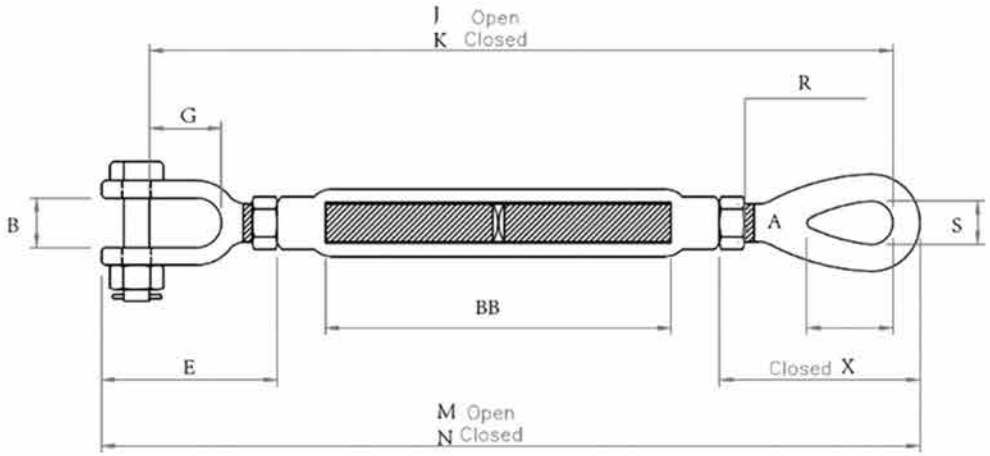
U.S. Type Turnbuckles With Jaw And Jaw



HE CODE	Size	WLL (lbs)	Wt (lbs)	A	B	E	G	J	K	M	N	BB
HETB-0611UU	1/4×4	500	0.37	0.25	0.45	1.66	0.64	11.19	7.19	12.18	8.18	4.07
HETB-0712UU	5/16×41/2	800	0.56	0.31	0.5	2.02	0.87	13.07	8.57	14.12	9.62	4.58
HETB-1016UU	3/8×6	1200	0.85	0.38	0.53	2.11	0.85	16.25	10.25	17.5	11.5	6.1
HETB-1316UU	1/2×6	2200	1.82	0.5	0.64	3.22	1.07	18.65	12.65	20.14	14.14	6.03
HETB-1324UU	1/2×9	2200	2.29	0.5	0.64	3.2	1.07	24.94	15.94	26.43	17.43	9.36
HETB-1332UU	1/2×12	2200	2.71	0.5	0.64	3.2	1.07	30.94	18.94	32.43	20.43	12.36
HETB-1616UU	5/8×6	3500	3.21	0.63	0.79	3.9	1.32	19.74	13.74	21.82	15.82	6.03
HETB-1624UU	5/8×9	3500	3.95	0.63	0.79	3.89	1.32	26.08	17.08	28.16	19.16	9.39
HETB-1632UU	5/8×12	3500	4.58	0.63	0.79	3.89	1.32	32.08	20.08	34.16	22.16	12.39
HETB-1916UU	3/4×6	5200	4.8	0.75	0.97	4.71	1.52	21.09	15.09	23.68	17.68	6.13
HETB-1925UU	3/4×9	5200	5.85	0.75	0.97	4.68	1.52	27.49	18.49	30.08	21.08	9.59
HETB-1932UU	3/4×12	5200	6.72	0.75	0.97	4.68	1.52	33.49	21.49	36.08	24.08	12.59
HETB-1948UU	3/4×18	5200	8.45	0.75	0.97	4.71	1.52	45.49	27.49	48.08	30.08	18.53
HETB-2231UU	7/8×12	7200	9.37	0.88	1.16	5.5	1.77	34.65	22.65	37.62	25.62	12.16
HETB-2248UU	7/8×18	7200	11.8	0.88	1.16	5.5	1.77	47.12	29.12	50.09	32.09	18.63
HETB-2516UU	1×6	10000	10.4	1	1.34	6.09	2.05	23.82	17.82	27.18	21.18	6.18
HETB-2531UU	1×12	10000	13.8	1	1.34	6.09	2.05	35.82	23.82	39.18	27.18	12.18
HETB-2547UU	1×18	10000	17.1	1	1.34	6.09	2.05	47.82	29.82	51.18	33.18	18.18
HETB-2564UU	1×24	10000	21	1	1.34	6.06	2.05	60.42	36.42	63.78	39.78	24.84
HETB-3216UU	1 1/4×6	15200		1.25	1.84	8.09	2.82		21.27		23.54	6.1
HETB-3231UU	1 1/4×12	15200	21.9	1.25	1.84	8.09	2.82	39.37	27.37	43.58	31.58	12.06
HETB-3246UU	1 1/4×18	15200	25.9	1.25	1.84	8.09	2.82	51.37	33.37	55.58	37.58	18.06
HETB-3263UU	1 1/4×24	15200	29.8	1.25	1.84	8.09	2.82	63.93	39.93	68.14	44.14	24.62
HETB-3832UU	1 1/2×12	21400	32.6	1.5	2.06	8.93	2.81	40.76	28.76	45.68	33.68	12.32
HETB-3847UU	1 1/2×18	21400	38	1.5	2.06	8.93	2.81	52.76	34.76	57.68	39.68	18.32
HETB-3864UU	1 1/2×24	21400	43.5	1.5	2.06	8.93	2.81	65.38	41.38	70.3	46.3	24.94
HETB-4447UU	1 3/4×18	28000	53.5	1.75	2.6	9.36	3.35	53.35	35.35	59.16	41.16	18.37
HETB-4462UU	1 3/4×24	28000	61.1	1.75	2.6	9.36	3.35	65.35	41.35	71.16	47.16	24.37
HETB-5163UU	2×24	37000	96.3	2	2.62	11.8	3.74	69.64	45.64	76.72	52.72	24.48
HETB-6463UU	2 1/2×24	60000	167	2.5	3.06	13.26	4.44	72.97	48.97	82.18	58.18	24.6
HETB-7063UU	2 3/4×24	75000	199	2.75	3.69	14.92	4.19	74.75	50.75	85.5	61.5	24.65

Turnbuckles are forged from carbon steel SAE-1020, hot dip galvanized to ASTM-A153.

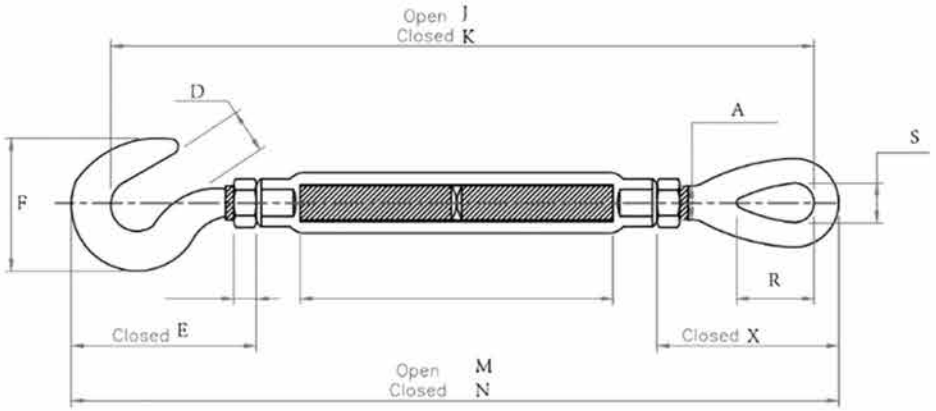
U.S. Type Turnbuckles With Jaw And Eye



HE CODE	Size	WLL (lbs)	Wt. (lbs)	A	B	E	G	J	K	M	N	R	S	X	BB
HETB-0611UO	1/4×4	500	0.33	0.25	0.45	1.66	0.64	11.57	7.57	12.28	8.28	0.81	0.34	1.76	4.07
HETB-0712UO	5/16×41/2	800	0.52	0.31	0.5	2.02	0.87	13.5	9	14.3	9.8	0.95	0.44	2.2	4.58
HETB-1016UO	3/8×6	1200	0.8	0.38	0.53	2.11	0.85	16.91	10.91	17.87	11.87	1.13	0.53	2.48	6.1
HETB-1316UO	1/2×6	2200	1.77	0.5	0.64	3.22	1.07	19.3	13.3	20.48	14.48	1.41	0.71	3.56	6.03
HETB-1324UO	1/2×9	2200	2.25	0.5	0.64	3.2	1.07	25.59	16.59	26.77	17.77	1.41	0.71	3.54	9.36
HETB-1332UO	1/2×12	2200	2.67	0.5	0.64	3.2	1.07	31.59	19.59	32.77	20.77	1.41	0.71	3.54	12.36
HETB-1616UO	5/8×6	3500	2.98	0.63	0.79	3.9	1.32	20.73	14.73	22.27	16.27	1.8	0.88	4.35	6.03
HETB-1624UO	5/8×9	3500	3.72	0.63	0.79	3.89	1.32	27.07	18.07	28.61	19.61	1.8	0.88	4.34	9.39
HETB-1632UO	5/8×12	3500	4.35	0.63	0.79	3.89	1.32	33.07	21.07	34.61	22.61	1.8	0.88	4.34	12.39
HETB-1916UO	3/4×6	5200	4.51	0.75	0.97	4.71	1.52	22.17	16.17	24.09	18.09	2.09	1	5.12	6.13
HETB-1925UO	3/4×9	5200	5.56	0.75	0.97	4.68	1.52	28.57	19.57	30.49	21.49	2.09	1	5.09	9.59
HETB-1932UO	3/4×12	5200	6.42	0.75	0.97	4.68	1.52	34.57	22.57	36.49	24.49	2.09	1	5.09	12.59
HETB-1948UO	3/4×18	5200	8.14	0.75	0.97	4.71	1.52	46.57	28.57	48.49	30.49	2.09	1	5.12	18.53
HETB-2231UO	7/8×12	7200	9.1	0.88	1.16	5.5	1.77	35.68	23.68	37.91	25.91	2.38	1.25	5.79	12.16
HETB-2248UO	7/8×18	7200	11.6	0.88	1.16	5.5	1.77	48.15	30.15	50.38	32.38	2.38	1.25	5.79	18.63
HETB-2516UO	1×6	10000	10	1	1.34	6.09	2.05	25.03	19.03	27.59	21.59	3	1.43	6.5	6.18
HETB-2531UO	1×12	10000	13.4	1	1.34	6.09	2.05	37.03	25.03	39.59	27.59	3	1.43	6.5	12.18
HETB-2547UO	1×18	10000	16.7	1	1.34	6.09	2.05	49.03	31.03	51.59	33.59	3	1.43	6.5	18.18
HETB-2564UO	1×24	10000	20.6	1	1.34	6.06	2.05	61.63	37.63	64.19	40.19	3	1.43	6.47	24.84
HETB-3231UO	11/4×12	15200	20.9	1.25	1.84	8.09	2.82	40.76	28.76	43.98	31.98	3.59	1.82	8.49	12.06
HETB-3246UO	11/4×18	15200	24.8	1.25	1.84	8.09	2.82	52.76	34.76	55.98	37.98	3.59	1.82	8.49	18.06
HETB-3263UO	11/4×24	15200	28.8	1.25	1.84	8.09	2.82	65.32	41.32	68.54	44.54	3.59	1.82	8.49	24.62
HETB-3832UO	11/2×12	21400	30.6	1.5	2.06	8.93	2.81	42.5	30.5	46.21	34.21	4.09	2.12	9.46	12.32
HETB-3847UO	11/2×18	21400	36	1.5	2.06	8.93	2.81	54.5	36.5	58.21	40.21	4.09	2.12	9.46	18.32
HETB-3864UO	11/2×24	21400	41.5	1.5	2.06	8.93	2.81	67.12	43.12	70.83	46.83	4.09	2.12	9.46	24.94
HETB-4447UO	13/4×18	28000	52.1	1.75	2.6	9.36	3.35	55.37	37.37	59.77	41.77	4.65	2.38	9.97	18.37
HETB-4462UO	13/4×24	28000	59.7	1.75	2.6	9.36	3.35	67.37	43.37	71.77	47.77	4.65	2.38	9.97	24.37
HETB-5163UO	2×24	37000	89.9	2	2.62	11.8	3.74	72.66	48.66	77.95	53.95	5.81	2.69	13.03	24.48
HETB-6463UO	2 1/2×24	60000	158	2.5	3.06	13.26	4.44	76.08	52.08	82.68	58.68	6.49	3.12	13.76	24.6
HETB-7063UO	2 3/4×24	75000	187	2.75	3.69	14.92	4.19	78.05	54.05	85.67	61.67	7	3.25	15.09	24.65

Turnbuckles are forged from carbon steel SAE-1020, hot dip galvanized to ASTM-A153.

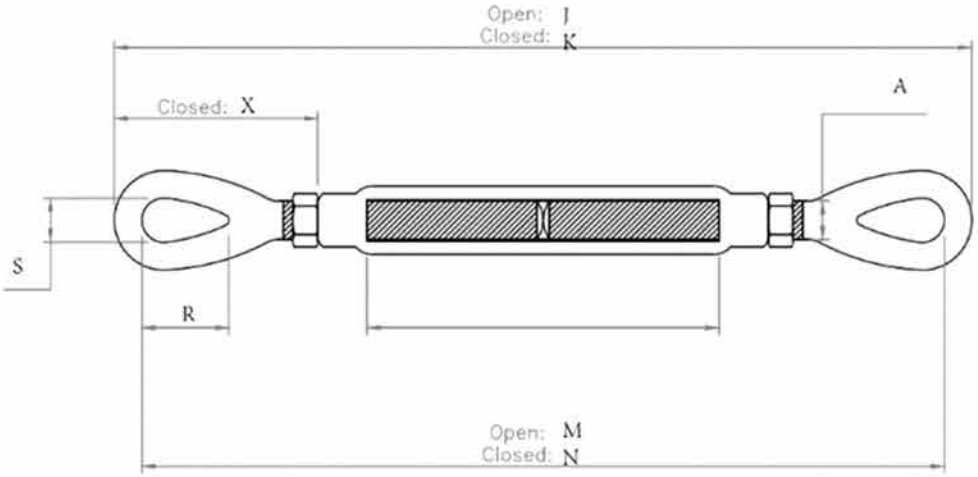
U.S. Type Turnbuckles With Hook And Eye



HE CODE	Size	WLL (lbs)	Wt. (lbs)	A	D	E	F	J	K	M	N	R	S	X	BB
HETB-0712OC	1/4×4	400	0.31	0.25	0.44	1.67	1.27	11.66	7.66	12.29	8.29	0.81	0.34	1.76	4.07
HETB-1016OC	5/16×4 1/2	700	0.5	0.31	0.5	2	1.5	13.5	9	14.28	9.78	0.95	0.44	2.2	4.58
HETB-1316OC	3/8×6	1000	0.79	0.38	0.56	2.28	1.76	17.09	11.09	18.04	12.04	1.13	0.53	2.48	6.1
HETB-1324OC	1/2×6	1500	1.8	0.5	0.65	3.53	2.28	19.57	13.57	20.79	14.79	1.41	0.71	3.56	6.03
HETB-1332OC	1/2×12	1500	2.7	0.5	0.65	3.51	2.28	31.86	19.86	33.08	21.08	1.41	0.71	3.54	12.36
HETB-1616OC	5/8×6	2250	2.98	0.63	0.9	4.24	2.81	21.11	15.11	22.61	16.61	1.8	0.88	4.35	6.03
HETB-1632OC	5/8×12	2250	4.35	0.63	0.9	4.23	2.81	33.45	21.45	34.95	22.95	1.8	0.88	4.34	12.39
HETB-1916OC	3/4×6	3000	4.21	0.75	0.98	5.07	3.33	22.61	16.61	24.45	18.45	2.09	1	5.12	6.13
HETB-1932OC	3/4×12	3000	6.52	0.75	0.98	5.04	3.33	35.01	23.01	36.85	24.85	2.09	1	5.09	12.59
HETB-1948OC	3/4×18	3000	8.24	0.75	0.98	5.07	3.33	47.01	29.01	48.85	30.85	2.09	1	5.12	18.53
HETB-2231OC	7/8×12	4000	9.34	0.88	1.13	5.82	3.78	36.11	24.11	38.23	26.23	2.38	1.25	5.79	12.16
HETB-2531OC	1×12	5000	13.9	1	1.25	6.56	4.25	37.65	25.65	40.06	28.06	3	1.43	6.5	12.18

Turnbuckles are forged from carbon steel SAE-1020, hot dip galvanized to ASTM-A153.

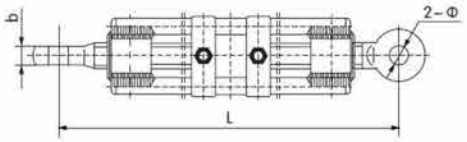
U.S. Type Turnbuckles With Eye And Eye



HE CODE	Size	WLL (lbs)	Wt. (KGs)	Dimensions(inch)								
				A	J	K	M	N	R	S	X	BB
HETB-0611OO	1/4×4	500	0.29	0.25	11.94	7.94	12.38	8.38	0.81	0.34	1.76	4.07
HETB-0712OO	5/16×41/2	800	0.48	0.31	13.92	9.42	14.48	9.98	0.95	0.44	2.2	4.58
HETB-1016OO	3/8×6	1200	0.75	0.38	17.56	11.56	18.24	12.24	1.13	0.53	2.48	6.1
HETB-1316OO	1/2×6	2200	1.72	0.5	19.94	13.94	20.82	14.82	1.41	0.71	3.56	6.03
HETB-1332OO	1/2×12	2200	2.63	0.5	32.23	20.23	33.11	21.11	1.41	0.71	3.54	12.36
HETB-1616OO	5/8×6	3500	2.75	0.63	21.72	15.72	22.72	16.72	1.8	0.88	4.35	6.03
HETB-1632OO	5/8×12	3500	4.12	0.63	34.06	22.06	35.06	23.06	1.8	0.88	4.34	12.39
HETB-1916OO	3/4×6	5200	4.22	0.75	23.24	17.24	24.5	18.5	2.09	1	5.12	6.13
HETB-1932OO	3/4×12	5200	6.12	0.75	35.64	23.64	36.9	24.9	2.09	1	5.09	12.59
HETB-1948OO	3/4×18	5200	7.83	0.75	47.64	29.64	48.9	30.9	2.09	1	5.12	18.53
HETB-2231OO	7/8×12	7200	8.83	0.88	36.7	24.7	38.2	26.2	2.38	1.25	5.79	12.16
HETB-2248OO	7/8×18	7200	11.5	0.88	49.17	31.17	50.67	32.67	2.38	1.25	5.79	18.63
HETB-2516OO	1×6	10000	9.62	1	26.24	20.24	28	22	3	1.43	6.5	6.18
HETB-2531OO	1×12	10000	13	1	38.24	26.24	40	28	3	1.43	6.5	12.18
HETB-2547OO	1×18	10000	16.3	1	50.24	32.24	52	34	3	1.43	6.5	18.18
HETB-2564OO	1×24	10000	20.2	1	62.84	38.84	64.6	40.6	3	1.43	6.47	24.84
HETB-3231OO	1 1/4×12	15200	19.9	1.25	42.14	30.14	44.38	32.38	3.59	1.82	8.49	12.06
HETB-3246OO	1 1/4×18	15200	23.8	1.25	54.14	36.14	56.38	38.38	3.59	1.82	8.49	18.06
HETB-3263OO	1 1/4×24	15200	27.8	1.25	66.7	42.7	68.94	44.94	3.59	1.82	8.49	24.62
HETB-3832OO	1 1/2×12	21400	28.7	1.5	44.24	32.24	46.74	34.74	4.09	2.12	9.46	12.32
HETB-3847OO	1 1/2×18	21400	34.1	1.5	56.24	38.24	58.74	40.74	4.09	2.12	9.46	18.32
HETB-3864OO	1 1/2×24	21400	39.6	1.5	68.86	44.86	71.36	47.36	4.09	2.12	9.46	24.94
HETB-4447OO	1 3/4×18	28000	50.7	1.75	57.38	39.38	60.38	42.38	4.65	2.38	9.97	18.37
HETB-4462OO	1 3/4×24	28000	58.2	1.75	69.38	45.38	72.38	48.38	4.65	2.38	9.97	24.37
HETB-5163OO	2×24	37000	83.5	2	75.68	51.68	79.18	55.18	5.81	2.69	13.03	24.48
HETB-6463OO	2 1/2×24	60000	149	2.5	79.18	55.18	83.18	59.18	6.49	3.12	13.76	24.6
HETB-7063OO	2 3/4×24	75000	174	2.75	81.34	57.34	85.84	61.84	7	3.25	15.09	24.65

Turnbuckles are forged from carbon steel SAE-1020, hot dip galvanized to ASTM-A153.

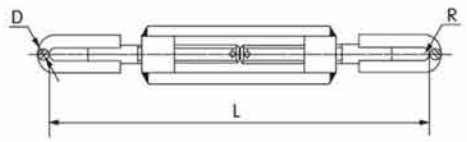
Turnbuckle (Type round)



HE CODE	Dimensions(mm)			Specified failure load(kN)	Weight (kg)
	b	L	Φ		
TBR-71	250~290	16	20	70	2.7
TBR-72	270~320	16	20	70	2.8
TBR-73	300~500	16	20	70	4
TBR-74	470~740	16	20	70	4.3
TBR-75	500~800	16	20	70	4.6
TBR-76	530~850	16	20	70	4.8
TBR-77	640~980	16	20	70	8.5
TBR-101	360~500	16	20	100	4.3
TBR-102	450~650	16	20	100	4.8
TBR-103	375~525	16	20	100	4.4
TBR-104	500~800	16	20	100	5.1
TBR-201	450~650	24	30	200	7.5
TBR-202	570~730	24	30	200	8

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.

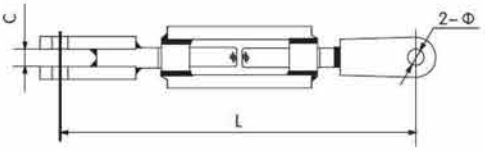
Turnbuckle (Type TBU)



HE CODE	Dimensions(mm)			Specified failure load(kN)	Weight (kg)
	L	D	R		
TBU-10	670~820	18	11	100	6.7

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.

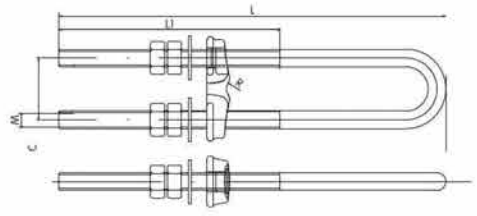
Turnbuckle (Channel clevises)



HE CODE	Dimensions(mm)			Specified failure load(kN)	Weight (kg)
	L	C	Φ		
TBC-10C	570~730	20	20	100	7
TBC-12C	570~730	30	30	120	8
TBC-20C	570~730	30	30	200	14.5

The cotter pins are stainless steel. the other parts are Hot-dip galvanized steel.

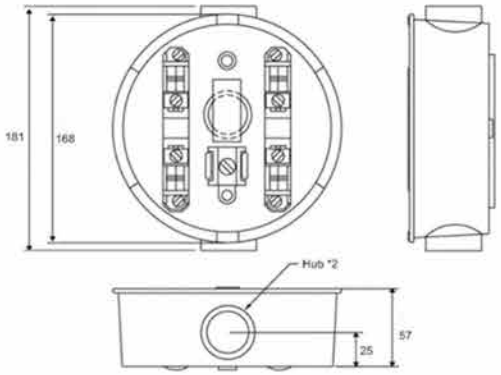
15.10 Adjustable Clamp



HE CODE	Dimensions(mm)					Bolts NO.
	L	L1	R	M	C	
HEGT-1	370	200	10	16	56	4

Meter Boxes

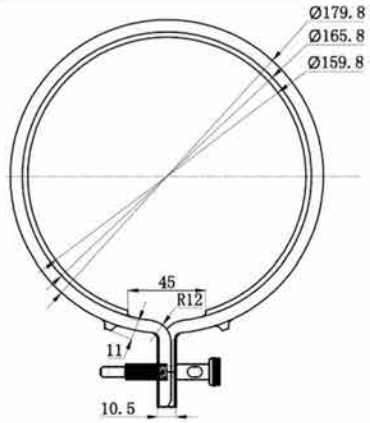
16.1 Circular Meter Boxes



HE Code	Description	Hub size
MBC12	30-100 Amps,220/240 V, Single-phase, 3 wires,4 terminals/jaws, Die-cast aluminum	1/2″
MBC34		3/4″
MBC1		1″
MBC114		1 1/4″
MBC112		1 1/2″
* 5&6 terminals are available upon request.		

Circular meter boxes are assembled with sealing ring.
Conforms to ANSI 12.7
Round base.
Raw material: die-cast aluminum shell, carbon steel
Finish: hot dip galvanized

16.2 Meter Socket Sealing Ring

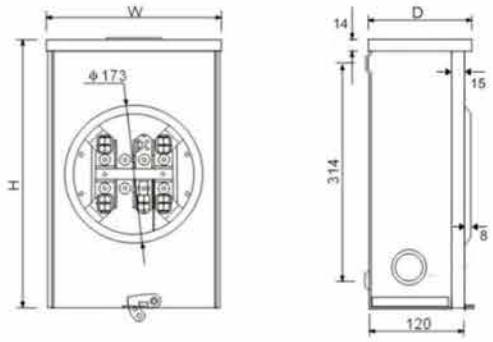


Sealing ring is produced to lock round base meter sockets.

HE Code	Description	Thickness (mm)
SRS01	Screw type sealing ring	1.5

Raw material: aluminum shell
Finish: hot dip galvanized

16.3 Square Meter Boxes



Square meter sockets are available in steel, aluminum and plastic.

HE Code	Description	H	W	D	Hub size
MBS01	200 Amps,240/600 V, Single phase,3 wires, 4 terminals, Ring type, phosphate treatment	382	218	137	2”
MBS02	200 Amps,240/600 V, Single phase,3 wires,4 terminals, Ringless, phosphate treatment	382	218	137	2”
MBS03	200 Amps,240/600 V, Single phase,3 wires,4 terminals, Ringless, phosphate treatment	398	284	115	2”
MBS04	200 Amps,240/600 V,3 phase,4 wires,7 terminals, Ring type, phosphate treatment	382	218	137	2”
MBS05	200 Amps,240/600 V,3 phase,4 wires,7 terminals, Ringless, phosphate treatment	382	218	137	2”

Extruded aluminum connectors are tin plated.
Galvanized steel shell is epoxy baked gray powder finished.
Hub size from 1/2”-2 1/2”

16.4 Junction box

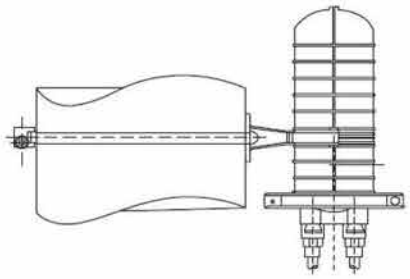
Cannonball type plastic joint box: used to connect ADSS and ADSS optical cables, with a maximum optical fiber capacity of 96 cores

.

Cannonball type plastic joint box: It has the advantages of high mechanical strength, good sealing performance, and strong corrosion resistance. It can be opened, expanded, repaired, reconnected, etc. repeatedly. The maximum capacity of optical fiber reaches 144 cores.

The additional loss of the optical fiber coil is ≤0.0IDb, and the optical fiber bending radius is ≥45mm. The optical cable is fixed using a special clamping method to effectively prevent the optical cable from being pinched, and the installation operation is extremely convenient.

16.4.1 ADSS Cannonball type plastic joint box for pole

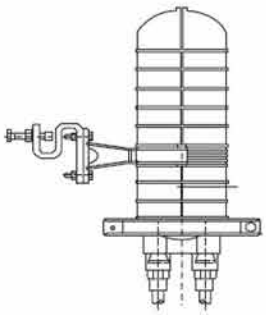


ADSS Cannonball type plastic joint box for pole

Type	Specifications	Cores No.	Weight (kg)	Remark
One in and one out, ADSS Cannonball type plastic joint box for pole	AJS 02 012-H*	12	1.8	
	AJS 02 024-H*	24	1.8	
	AJS 02 036-H*	36	1.8	
	AJS 02 048-H*	48	1.8	
	AJS 02 072-H*	72	1.8	
	AJS 02 096-H*	96	1.8	
Two in and two out, ADSS Cannonball type plastic joint box for pole	AJS 04 012-H*	12	1.8	Also suitable for two in and one out
	AJS 04 024-H*	24	1.8	
	AJS 04 036-H*	36	1.8	
	AJS 04 048-H*	48	1.8	
	AJS 04 072-H*	72	1.8	
	AJS 04 096-H*	96	1.8	

H* indicates stainless steel belt model

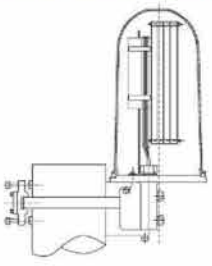
16.4.2 ADSS Cannonball type plastic joint box for tower



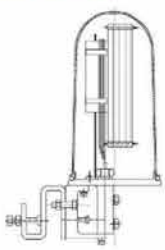
ADSS Cannonball type plastic joint box for tower

Type	Specifications	Cores No.	Weight (kg)	Remark
One in and one out, ADSS Cannonball type plastic joint box for tower	AJS 02 012-T	12	1.8	
	AJS 02 024-T	24	1.8	
	AJS 02 036-T	36	1.8	
	AJS 02 048-T	48	1.8	
	AJS 02 072-T	72	1.8	
	AJS 02 096-T	96	1.8	
Two in and two out, ADSS Cannonball type plastic joint box for tower	AJS 04 012-T	12	1.8	Also suitable for two in and one out
	AJS 04 024-T	24	1.8	
	AJS 04 036-T	36	1.8	
	AJS 04 048-T	48	1.8	
	AJS 04 072-T	72	1.8	
	AJS 04 096-T	96	1.8	

16.4.3 Cannonball type metal joint box



Cannonball type metal joint box for pole



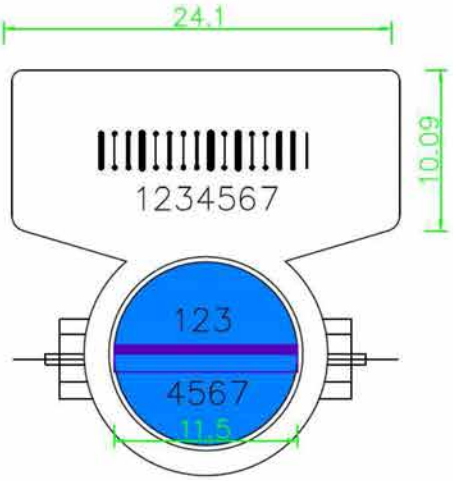
Cannonball type metal joint box for tower

Type	Model	Weight (kg)	Material	Installation position
Cannonball type metal joint box for pole	PJJ ** 024-H*	6.7	Aluminum alloy	For pole
	PJJ ** 048-H*	6.7	Aluminum alloy	For pole
	PJJ ** 096-H*	6.7	Aluminum alloy	For pole
	PJJ ** 144-H*	6.7	Aluminum alloy	For pole
Cannonball type metal joint box for tower	PJJ ** 024-T	6.7	Aluminum alloy	For tower
	PJJ ** 048-T	6.7	Aluminum alloy	For tower
	PJJ ** 096-T	6.7	Aluminum alloy	For tower
	PJJ ** 144-T	6.7	Aluminum alloy	For tower

** Number of ports, between 02-05, maximum 5 ports, H* means for poles, T means for towers.

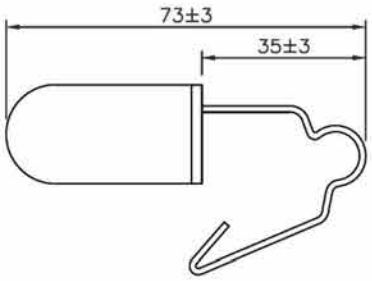
16.5 Meter Box Accessories

16.5.1 Butterfly insert Safety Seal



		M-8K	Amarillo
Tolerance	±5%	M-8I	Rojo
Dimensions	MM	M-8G	Azul
Material	Polycarbonate	Code	Color

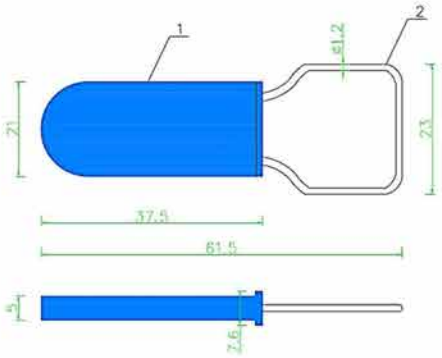
16.5.2 Plastic tag



Semi-assemble

1，Dimensions: mm
2，Material: plastic body, carbon steel hook.

16.5.3 Blue safety seals



Tolerance	±5%		
Dimensions	MM		
Material	1- Polycarbonate	M-8A	Azul
	2-Steel wire	Code	Color

Pole Bands

17.1 4-Way Adjustable Pole Bands

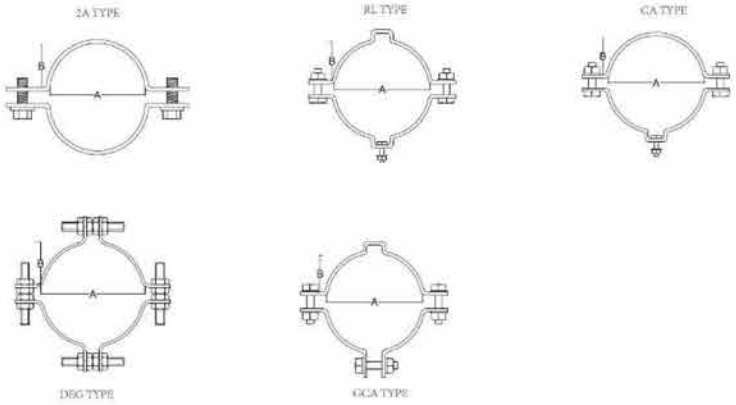
4-way adjustable pole bands, used on wood and concrete poles, work as a shield wire support and anti-split device, designed for conductor and guy attachments, fitting for various line angle attachments .
The band sections are provided with a bonding hole to facilitate grounding.
Square holes in each band section are for accommodation either lag screws or a ground connector.

HE Code	Description	Dimensions				Wt.
		Steel size	For pole dia.	Rod	Square hole	kg
PBF-1	4 way pole band	5/16"*3"	6"-10 1/2"	3/4"*6"	9/16"	7.144
PBF-2	4 way pole band	1/4"*4"	7 1/2"-12"	3/4"*6"	9/16"	5.634
PBF-3	4 way pole band	1/4"*4"	8"-12"	3/4"*6"	9/16"	6.074
PBF-4	4 way pole band	1/4"*4"	11"-16"	3/4"*6"	9/16"	7.915
PBF-5	4 way pole band	1/4"*4"	9 1/2"-16"	3/4"*8"	9/16"	12.791

Pole bands are produced in carbon steel SAE 1010 to 1020, hot dip galvanized to ASTM A-153.
Pole bands are supplied with 4 double arming bolts and 16 square nuts, shipped unassembled.
9/16" square hole for 1/2" lag screw.

17.2 Pole Bands Mounting Clamp

Secondary rack pole bands are produced to joint secondary racks to tubular steel or wood poles.
There are two types. Single cup type pole bands are designed to attach one rack.



HE Code	Range		Dimension		Thickness	Width		
	mm	inch	A mm	B mm	mm	Light mm	Medium mm	Heavy mm
HEPB06X	127-152	5-6	152	127	6	38	50	65
HEPB07X	152-178	6-7	178	152	6	38	50	65
HEPB08X	178-203	7-8	203	178	6	38	50	65
HEPB09X	203-229	8-9	229	203	6	38	50	65
HEPB10X	229-254	9-10	254	229	6	38	50	65
HEPB11X	254-279	10-11	279	254	6	38	50	65
HEPB12X	279-305	11-12	305	279	6	38	50	65
HEPB13X	305-330	12-13	330	305	6	38	50	65
HEPB14X	330-356	13-14	356	330	6	38	50	65
HEPB15X	356-381	14-15	381	356	6	38	50	65

Pole bands are produced in carbon steel SAE 1010 to 1020, hot dip galvanized to ASTM A-153.
Pole bands are supplied with 3 carriage bolts, 3 spring washers and 3 square nuts.
Carriage bolts are to attach the racks and tighten bands on a wide range of wood or steel poles.

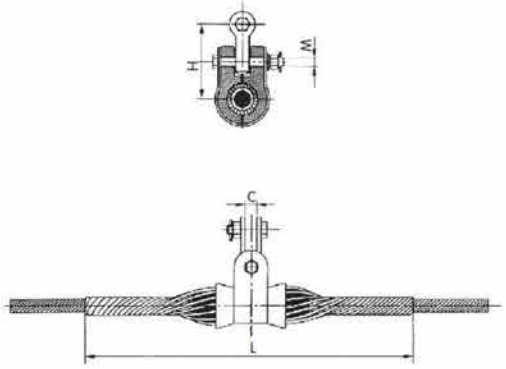
17.3 Transformer Mounting Brackets

HE Code	Description	Wt.(kg)
TMB-1	Transformer mounting brackets	18

Material carbon steel Q345 is hot dip galvanized to ASTM A153.

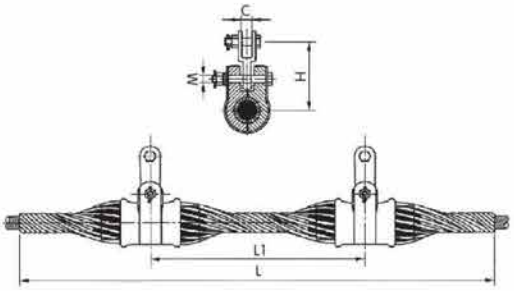
Preformed line products

18.1 CLYX type Preformed suspension clamp



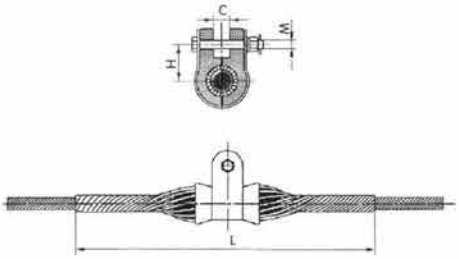
HE Code	Suitable Conductor	Main dimensions				Specified Failure Load (kN)	Weight (kg)
		L	C	M	H		
CLYX-40-95-20	JL/G1A-95/20	1118	20	16	140	40	2.1
CLYX-40-150-25	JL/G1A-150/25	1372	20	16	145	40	2.6
CLYX-40-185-30	JL/G1A-185/30	1422	20	16	145	40	2.8
CLYX-40-240-30	JL/G1A-240/30	1626	20	16	150	40	3.7
CLYX-40-240-40	JL/G1A-240/40	1626	20	16	150	40	3.7
CLYX-40-300-25	JL/G1A-300/25	1676	20	16	155	40	4.9
CLYX-40-300-40	JL/G1A-300/40	1702	20	16	155	40	4.9
CLYX-40-400-35	JL/G1A-400/35	2083	20	16	160	40	6.5
CLYX-40-400-50	JL/G1A-400/50	2083	20	16	160	40	6.7
CLYX-40-500-45	JL/G1A-500/45	2083	20	16	160	40	6.8
CLYX-40-630-45	JL/G1A-630/45	2235	20	16	170	40	9.6
CLYX-40-630-55	JL/G1A-630/55	2235	20	16	170	40	9.6
CLYX-60-240-30	JL/G1A-240/30	1626	20	16	150	60	3.7
CLYX-60-240-40	JL/G1A-240/40	1626	20	16	150	60	3.7
CLYX-60-300-25	JL/G1A-300/25	1676	20	16	155	60	4.9
CLYX-60-300-40	JL/G1A-300/40	1702	20	16	155	60	4.9
CLYX-60-400-35	JL/G1A-400/35	2083	20	16	160	60	6.5
CLYX-60-400-50	JL/G1A-400/50	2083	20	16	160	60	6.7
CLYX-60-500-45	JL/G1A-500/45	2083	20	16	160	60	6.8
CLYX-60-630-45	JL/G1A-630/45	2235	20	16	170	60	9.6
CLYX-60-630-55	JL/G1A-630/55	2235	20	16	170	60	9.6
CLYX-80-300-25	JL/G1A-300/25	1676	20	18	155	80	5
CLYX-80-300-40	JL/G1A-300/40	1702	20	18	155	80	5.3
CLYX-80-400-35	JL/G1A-400/35	2083	20	18	160	80	7
CLYX-80-400-50	JL/G1A-400/50	2083	20	18	160	80	7.2
CLYX-80-500-45	JL/G1A-500/45	2083	20	18	160	80	7.3
CLYX-80-630-45	JL/G1A-630/45	2235	20	18	170	80	10.1
CLYX-80-630-55	JL/G1A-630/55	2235	20	18	170	80	10.1
CLYX-100-300-25	JL/G1A-300/25	1676	20	18	155	100	5.6
CLYX-100-300-40	JL/G1A-300/40	1702	20	18	155	100	5.6
CLYX-100-400-35	JL/G1A-400/35	2083	20	18	160	100	7.2
CLYX-100-400-50	JL/G1A-400/50	2083	20	18	160	100	7.4

18.2 HYXD type Preformed suspension clamp



HE Code	Suitable Conductor	Main dimensions					Specified Failure Load (kN)	Weight (kg)
		L	L1	C	M	H		
HYXD-80-95-20	JL/G1A-95/20	1470	400	20	16	140	80	3.8
HYXD-80-150-25	JL/G1A-150/25	1830	400	20	16	145	80	4.6
HYXD-80-185-30	JL/G1A-185/30	1830	400	20	16	145	80	4.8
HYXD-80-240-30	JL/G1A-240/30	2080	400	20	16	150	80	6.1
HYXD-80-240-40	JL/G1A-240/40	2080	400	20	16	150	80	6.1
HYXD-80-300-25	JL/G1A-300/25	2290	450	20	16	155	80	7.2
HYXD-80-300-40	JL/G1A-300/40	2290	450	20	16	155	80	7.2
HYXD-80-400-35	JL/G1A-400/35	2740	500	20	16	160	80	10.4
HYXD-80-400-50	JL/G1A-400/50	2740	500	20	16	160	80	10.8
HYXD-80-500-45	JL/G1A-500/45	2740	500	20	16	160	80	10.9
HYXD-80-630-45	JL/G1A-630/45	2970	600	20	16	170	80	15.2
HYXD-80-630-55	JL/G1A-630/55	2970	600	20	16	170	80	15.2
HYXD-120-240-30	JL/G1A-240/30	2080	400	20	16	150	120	6.1
HYXD-120-240-40	JL/G1A-240/40	2080	400	20	16	150	120	6.1
HYXD-120-300-25	JL/G1A-300/25	2290	450	20	16	155	120	7.2
HYXD-120-300-40	JL/G1A-300/40	2290	450	20	16	155	120	7.2
HYXD-120-400-35	JL/G1A-400/35	2740	500	20	16	160	120	10.4
HYXD-120-400-50	JL/G1A-400/50	2740	500	20	16	160	120	10.8
HYXD-120-500-45	JL/G1A-500/45	2740	500	20	16	160	120	10.9
HYXD-120-630-45	JL/G1A-630/45	2970	600	20	16	170	120	15.2
HYXD-120-630-55	JL/G1A-630/55	2970	600	20	16	170	120	15.2
HYXD-160-300-25	JL/G1A-300/25	2290	450	20	18	155	160	7.2
HYXD-160-300-40	JL/G1A-300/40	2290	450	20	18	155	160	7.2
HYXD-160-400-35	JL/G1A-400/35	2740	500	20	18	160	160	11.2
HYXD-160-400-50	JL/G1A-400/50	2740	500	20	18	160	160	11.6
HYXD-160-500-45	JL/G1A-500/45	2740	500	20	18	160	160	11.7
HYXD-160-630-45	JL/G1A-630/45	2970	600	20	18	170	160	16
HYXD-160-630-55	JL/G1A-630/55	2970	600	20	18	170	160	16

18.3 Ground wire Preformed suspension clamp

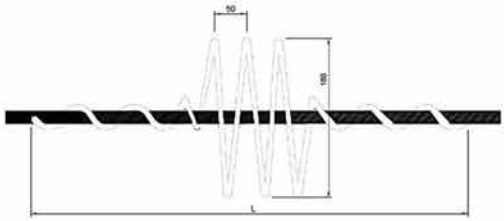


HE Code	Suitable Conductor	Main dimensions				Specified Failure Load (kN)	Weight (kg)
		L	H	C	M		
HYXE-60-35G	GJ-35	660	53	20	16	60	1.2
HYXE-60-50G	GJ-50	660	53	20	16	60	1.2
HYXE-60-80G	GJ-80	900	53	20	16	60	1.7
HYXE-60-100G	GJ-100	1016	50	20	16	60	1.1
HYXE-60-80BG	80-section aluminum clad steel strand	914	53	20	16	60	1.6
HYXE-60-100BG	100-section aluminum clad steel strand	1016	50	20	16	60	1.1
HYXE-60-120BG	120-section aluminum clad steel strand	1118	50	20	16	60	1.4
HYXE-60-150BG	150-section aluminum clad steel strand	1270	50	20	16	60	1.5

Splicing Fittings

19.1 Bird Diverter

19.1.1 Bird Diverter



A diverter for diverting birds away from overhead lines.

HE Code	Conductor range (mm)	L(mm)	Rod diameter Ød (mm)	Color
HE003	Ø9-11.4	560±10	12.7±0.3	Yellow
HE004	Ø11.5-15.2	700±10	12.7±0.3	Yellow
HE005	Ø15.3-19.6	860±10	12.7±0.3	Yellow
HE006	Ø19.7-22	990±10	12.7±0.3	Yellow
HE007	Ø21.9-23.3	1100±10	12.7±0.3	Yellow

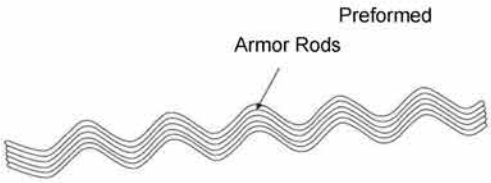
19.1.2 Bird Diverter

Working Temperature :-10°C~+40°C.
Assembled with Stainless Steel Fasteners
Fixed clip: Material PA, black color, rubber pad,etc.
Board: Material PVC, white color, firm anti-wear ring
Reflective film: 3M
Physical Features : Luminescent material emits visible light for up to 10 hours

19.2 Preformed Armor Rods

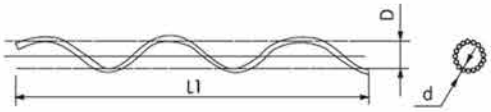
The main function of preformed armor rods is to protect conductors/cables against bending, compression, abrasion and arcover damage and to provide restorative repair.

19.2.1 Preformed Armor Rods For Optical Cable



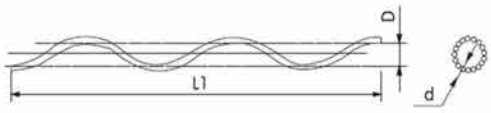
HE Code	Suitable Conductor (mm)	Material	Length (mm) L	Weight (kg)
TFHE 0800	7.4-8.0	Anti-rust aluminum alloy	400	0.12
TFHE 0880	8.1-8.8	Anti-rust aluminum alloy	400	0.12
TFHE 0960	9.0-9.6	Anti-rust aluminum alloy	450	0.15
TFHE 1010	9.7-10.1	Anti-rust aluminum alloy	450	0.15
TFHE 1060	10.2-10.6	Anti-rust aluminum alloy	450	0.17
TFHE 1110	10.7-11.1	Anti-rust aluminum alloy	450	0.17
TFHE 1160	11.2-11.6	Anti-rust aluminum alloy	500	0.19
TFHE 1170	11.7-11.7	Anti-rust aluminum alloy	500	0.21
TFHE 1200	11.8-12.0	Anti-rust aluminum alloy	500	0.21
TFHE 1270	12.1-12.7	Anti-rust aluminum alloy	500	0.21
TFHE 1290	12.8-12.9	Anti-rust aluminum alloy	500	0.23
TFHE 1360	13.0-13.6	Anti-rust aluminum alloy	500	0.23
TFHE 1410	13.7-14.1	Anti-rust aluminum alloy	500	0.23
TFHE 1430	14.2-14.3	Anti-rust aluminum alloy	500	0.23
TFHE 1450	14.4-14.5	Anti-rust aluminum alloy	500	0.23
TFHE 1510	14.6-15.1	Anti-rust aluminum alloy	500	0.25
TFHE 1580	15.2-15.8	Anti-rust aluminum alloy	550	0.28
TFHE 1600	15.9-16.0	Anti-rust aluminum alloy	550	0.3
TFHE 1690	16.1-16.9	Anti-rust aluminum alloy	550	0.3
TFHE 1730	17.0-17.3	Anti-rust aluminum alloy	550	0.3
TFHE 1800	17.4-18.0	Anti-rust aluminum alloy	550	0.33
TFHE 1840	18.1-18.4	Anti-rust aluminum alloy	550	0.33
TFHE 1880	18.5-18.8	Anti-rust aluminum alloy	550	0.35

19.2.2 Preformed armour rods for conductor repair



HE Code	Suitable Conductor	Dimensions(mm)			No. of a strand	Weight (kg)
		D	d	L1		
HEAR-95-15	LGJ-95/15	11.4	3.6	420	13	0.16
HEAR-95-20	LGJ-95/20	11.4	3.6	420	13	0.16
HEAR-95-55	LGJ-95/55	13	3.6	420	13	0.17
HEAR-120-7	LGJ-120/7	12	3.6	450	14	0.18
HEAR-120-20	LGJ-120/20	12.5	3.6	450	14	0.18
HEAR-120-25	LGJ-120/25	13	3.6	450	14	0.19
HEAR-150-8	LGJ-150/8	13.3	3.6	480	16	0.2
HEAR-150-20	LGJ-150/20	14.7	3.6	480	16	0.21
HEAR-150-25	LGJ-150/25	14.2	3.6	480	16	0.21
HEAR-150-35	LGJ-150/35	14.5	3.6	480	16	0.21

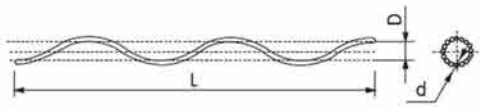
Material is aluminum alloy.



HE Code	Suitable Conductor	Dimensions(mm)			No. of a strand	Weight (kg)
		D	d	L1		
HEAR-35	LGJ-35	7.1	3.6	270	9	0.08
HEAR-50	LGJ-50	8.2	3.6	300	10	0.09
HEAR-70	LGJ-70	9.7	3.6	340	11	0.12
HEAR-95	LGJ-95	11.6	4.6	420	11	0.23
HEAR-120	LGJ-120	12.9	4.6	450	12	0.27
HEAR-150	LGJ-150	14.4	4.6	480	13	0.3
HEAR-185	LGJ-185	16.2	4.6	580	14	0.39
HEAR-240	LGJ-240	18.4	6.3	640	12	0.66
HEAR-300	LGJ-300	20.5	6.3	700	13	0.8
HEAR-400	LGJ-400	23.8	6.3	820	14	1.05
HEAR-300Q	LGJ-300Q	20	6.3	700	13	0.8
HEAR-400Q	LGJ-400Q	23	6.3	820	14	1.05
HEAR-500Q	LGJ-500Q	25.7	7.8	870	13	1.74

Material is aluminum alloy.

19.2.3 Preformed armor rods



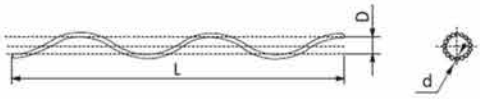
1, Preformed armor rods

HE Code	Suitable Conductor	Main dimensions(mm)			No. of a group	Weight (kg)
		D	d	L		
HARP-35-6	LGJ-35/6	7.1	3.6	1000	9	0.2
HARP-50-8	LGJ-50/8	8	3.6	1100	9	0.25
HARP-50-30	LGJ-50/30	9.8	3.6	1300	11	0.3
HARP-70-10	LGJ-70/10	9.7	3.6	1300	11	0.33
HARP-95-15	LGJ-95/15	11.4	3.6	1400	13	0.53
HARP-95-20	LGJ-95/20	11.4	3.6	1400	13	0.54
HARP-95-55	LGJ-95/55	13.3	3.6	1500	16	0.62
HARP-120-7	LGJ-120/7	12	3.6	1400	14	0.55
HARP-120-20	LGJ-120/20	12.5	3.6	1400	14	0.57
HARP-120-25	LGJ-120/25	13	3.6	1400	14	0.58
HARP-120-70	LGJ-120/70	14.9	4.6	1800	14	0.75
HARP-150-8	LGJ-150/8	13.3	3.6	1500	16	0.62
HARP-150-20	LGJ-150/20	14.7	3.6	1500	16	0.65
HARP-150-25	LGJ-150/25	14.2	3.6	1500	16	0.64
HARP-150-35	LGJ-150/35	14.5	3.6	1500	16	0.66
HARP-185-10	LGJ-185/10	14.9	4.6	1800	14	1.24
HARP-185-25	LGJ-185/25	15.7	4.6	1800	14	1.25
HARP-185-30	LGJ-185/30	15.7	4.6	1800	14	1.26
HARP-185-45	LGJ-185/45	16.3	4.6	1800	14	1.26
HARP-210-10	LGJ-210/10	15.9	4.6	1800	14	1.27
HARP-210-25	LGJ-210/25	16.6	4.6	1800	14	1.28
HARP-210-35	LGJ-210/35	16.9	4.6	1800	14	1.28
HARP-210-50	LGJ-210/50	17.3	4.6	1800	14	1.3
HARP-240-30	LGJ-240/30	17.9	4.6	1900	16	1.44
HARP-240-40	LGJ-240/40	17.9	4.6	1900	16	1.44
HARP-240-55	LGJ-240/55	18.6	4.6	1900	13	1.5
HARP-300-15	LGJ-300/15	19.1	6.3	2000	13	2.3
HARP-300-20	LGJ-300/20	19.4	6.3	2000	13	2.3
HARP-300-25	LGJ-300/25	19.7	6.3	2000	13	2.33
HARP-300-40	LGJ-300/40	19.9	6.3	2000	13	2.34
HARP-300-50	LGJ-300/50	20.1	6.3	2000	13	2.34
HARP-300-70	LGJ-300770	20.9	6.3	2000	13	2.54
HARP-400-20	LGJ-40D/20	22.3	6.3	2200	14	2.8
HARP-400-25	LGJ-400/25	22.1	6.3	2200	14	2.8
HARP-400-35	LGJ-400/35	22.3	6.3	2200	14	2.8
HARP-400-50	LGJ-400/50	23	6.3	2200	14	2.8
HARP-400-65	LGJ-400/65	23.2	6.3	2200	14	2.83
HARP-400-95	LGJ-400/95	24.8	6.3	2200	14	2.85
HARP-500-35	LGJ-50D/35	24.9	6.3	2500	16	3.48
HARP-500-45	LGJ-500/45	24.9	6.3	2500	16	3.48
HARP-500-65	LGJ-500/65	25.7	6.3	2500	16	3.5
HARP-630-45	LGJ-630/45	27.9	7.8	2500	15	5.32
HARP-630-55	LGJ-630/55	28.5	7.8	2500	15	5.4
HARP-630-80	LGJ-630/80	28.9	7.8	2500	15	5.4
HARP-720-50	ACSR-720/50	31	7.8	3000	15	6.2
HARP-800-55	LGJ-800/55	31.8	7.8	2500	17	6.02
HARP-800-70	LGJ-800/70	32.1	7.8	2500	17	6.1
HARP-800-100	LGJ-800/100	32.3	7.8	2500	17	6.2

Material is aluminum alloy.

HE Code	Suitable Conductor	Main dimensions(mm)			No. of a group	Weight (kg)
		D	d	L		
HARL-95-20	JL/G1A-95/20	11.4	3.6	1400	13	0.55
HARL-150-25	JL/G1A-150/25	14.2	3.6	1500	16	0.7
HARL-185-30	JL/G1A-185/30	15-7	4.6	1800	14	1.3
HARL-240-30	JL/G1A-240/30	17.9	4.6	1900	16	1.5
HARL-240-40	JL/G1A-240/40	17.9	4.6	1900	16	1.5
HARL-300-25	JL/G1A-300/25	19.7	6.3	2000	13	2.4
HARL-300-40	JL/G1A-300/40	19.9	6.3	2000	13	2.4
HARL-400-35	JL/G1A-400/35	22.3	6.3	2200	14	2.8
HARL-400-50	JL/G1A-400/50	23	6.3	2200	14	2.8
HARL-500-45	JL/G1A-500/45	24.9	6.3	2500	16	3.5
HARL-630-45	JL/G1A-630/45	27.9	7.8	2500	15	5.4
HARL-630-55	JL/G1A-630/55	28.5	7.8	2500	15	5.4

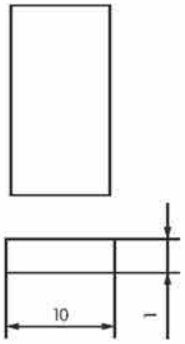
2, Preformed armor rods



HE Code	Suitable Conductor	Main dimensions(mm)			No. of a group	Weight (kg)
		D	d	L		
ARBG-50	LBGJ-50-23AC	7.7	3.6	1000	9	0.95
ARBG-80	JLB1A-80	9.6	36	1400	12	1.61
ARBG-100	LBGJ-100-20AC	11	3.6	1400	12	1.92
ARBG-120	JLB1A-120	12	3.6	1400	14	1.72
ARBG-150	LBGJ-150-40AC	1312	3.6	1500	15	1.98
ARBG-185	LBGJ-185-20AC	14.5	3.6	1500	16	2.1

Aluminum covered steel wire

19.2.4 Aluminium armour tape



HE Code	Thickness	Width	Weight (kg)	
			kg/m	m/kg
HEAT 1-10	1	10	0.027	37

Material is aluminum alloy.

19.2.5 Preformed Armor Rods

HE Code	Diameter Range (mm)		Conductor Size	Rods/set	Length (mm)
HEAR062-065	6.2	6.58	#4,6/1, 7/1	7	1016
HEAR066-069	6.6	6.93	#3,7W Aluminum Alloy	7	1067
HEAR069-073	6.96	7.34	#3,7W Aluminum Alloy	8	1067
HEAR073-078	7.37	7.82	#2,7W Aluminum Alloy	8	1067
HEAR078-082	7.85	8.28	#2,7W Aluminum Alloy	9	1118
HEAR083-087	8.31	8.79	#1,7W Aluminum Alloy	9	1168
HEAR088-093	8.81	9.3	#1, 6/1	9	1220
HEAR093-098	9.31	9.88	1/0, 7W All Aluminum	10	1270
HEAR099-104	9.91	10.49	1/0, 6/1	9	1321
HEAR105-110	10.52	11.07	3/0, 7W Comp	9	1340
HEAR111-117	11.1	11.76	2/0, 6/1	10	1370
HEAR117-124	11.79	12.45	3/0, 7W-19W All Aluminum	10	1370
HEAR124-132	12.47	13.23	3/0, 6/1	11	1422
HEAR132-140	13.24	14	4/0, 7W-19W All Aluminum	11	1472
HEAR140-148	14.01	14.86	4/0,6/1	11	1526
HEAR148-153	14.87	15.39	266.8, 19W	12	1575
HEAR154-160	15.4	16	266.8, 18/1	12	1628
HEAR160-166	16.03	16.64	266.8, 26/7	12	1628
HEAR166-172	16.66	17.25	336.4, 19W	13	1678
HEAR173-178	17.3	17.86	300, 26/7	12	1730
HEAR178-188	17.87	18.8	336.4, 26/7	12	1830
HEAR188-198	18.81	19.86	379.5 18/1	12	1830
HEAR198-206	19.87	20.68	397.5 26/7	12	1930
HEAR206-214	20.69	21.46	636 19W	12	1930
HEAR214-230	21.47	23.04	480.71	12	1980
HEAR230-236	23.05	23.6	636 37W	13	2030
HEAR236-247	23.61	24.79	608 5/7	13	2234
HEAR248-258	24.8	25.81	639 5/7	11	2337
HEAR258-262	25.82	26.29	795 37W-61W	12	2390
HEAR263-270	26.3	27.03	715.5 26/7	12	2440
HEAR270-278	27.04	27.89	798 3/7	12	2440
HEAR279-289	27.9	28.93	798 5/7	12	2540
HEAR289-294	28.94	29.49	990	12	2540
HEAR295-306	29.5	30.68	1003.5 37W-61W	13	2540
HEAR307-322	30.71	32.23	1113 45/7	12	2540
HEAR322-337	32.26	33.71	1192.5 45/7	12	2540
HEAR337-352	33.73	35.32	1278 3/7	13	2540
HEAR353-365	35.33	36.58	1437 3/7	11	2540
HEAR366-383	36.6	38.3	1596 3/7	12	2540
HEAR383-400	38.33	40.08	1592 16/19	12	1500
HEAR398-419	39.88	41.94	1784 8/19	13	2540
HEAR419-438	41.96	43.89		13	2540
HEAR439-459	43.92	45.95	2160 8/19	14	2540
HEAR459-482	45.97	48.21	250091W	14	2540
HEAR482-505	48.23	50.57		15	2540
HEAR506-530	50.6	53.09		15	2540
HEAR531-554	53.11	55.48		15	2540

Raw material: aluminum alloy

19.3 Preformed Guy Grip

A preformed guy grip is a set of helical line formed wires, usually is made of galvanized steel, aluminum alloy, aluminum clad steel, copper clad steel and stainless steel.
The length is glued with/without Neoprene.
It is widely used in power transmission line, power distribution line, telecom line, railway power line, bridge pull line for ADSS, OPGW, OPPC, AAC, AAAC, ACSR, etc.
Per current production capacity, our products can be suitable to conductor diameter up to 50mm, length up to 6000mm, tension up to 500KN.
Our technical experts are able to design according to customers' requirements.
Preformed guy grips are easily and safely operated and installed.

19.3.1 Preformed Guy Grip

Dead End Grip
Raw material: galvanized steel, used for Steel Cable, Strand, Stay wire.

He Code	Dia. Range(mm)	Inch Size	Length (mm)	Color code
HEDG 032-033	3.02-3.38	1/8″	320	Red
HEDG 045-049	4.58-4.94	3/16″	560	Blue
HEDG 054-057	5.40-5.75		560	Yellow
HEDG 062-066	6.20-6.60	1/4″	636	Green
HEDG 076-079	7.65-7.95	5/16″	790	Black
HEDG 089-093	8.93-9.30		903	Red
HEDG 093-097	9.35-9.71	3/8″	903	Blue
HEDG 097-100	9.72-10.07		920	Yellow
HEDG 108-112	10.82-11.29	7/16″	1018	Green
HEDG 117-121	11.70-12.10		1050	Black
HEDG 125-131	12.50-13.10	1/2″	1335	Red
HEDG 139-146	13.91-14.60	9/16″	1464	Blue
HEDG 146-152	14.61-15.20		1500	Yellow
HEDG 157-160	15.70-16.06	5/8″	1560	Green
HEDG 188-192	18.87-19.23	3/4″	1780	Black

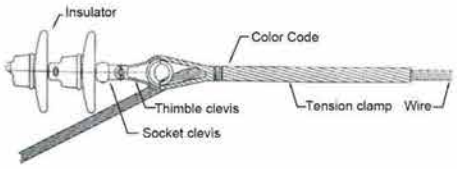
Pole Top Make off
Raw material: galvanized steel, used for wrapping on pole for stay wire.

He Code	Dia. Range(mm)	Inch Size	Length(mm)	Color code
HEMF 032-033	3.02-3.38	1/8″	1070	Red
HEMF 045-049	4.58-4.94	3/16″	1070	Blue
HEMF 054-057	5.40-5.75		1100	Yellow
HEMF 062-066	6.20-6.60	1/4″	1100	Green
HEMF 076-079	7.65-7.95	5/16″	1100	Black
HEMF 089-093	8.93-9.30		1150	Red
HEMF 093-097	9.35-9.71	3/8″	1200	Blue
HEMF 097-100	9.72-10.07		1200	Yellow
HEMF 108-112	10.82-11.29	7/16″	1260	Green
HEMF 117-121	11.70-12.10		1260	Black
HEMF 125-131	12.50-13.10	1/2″	1335	Red
HEMF 139-146	13.91-14.60	9/16″	1464	Blue
HEMF 146-152	14.61-15.20		1500	Yellow
HEMF 157-160	15.70-16.06	5/8″	1560	Green
HEMF 188-192	18.87-19.23	3/4″	1780	Black

Dead-end Distribution Grip
Raw material: Aluminum or Aluminum-clad steel wire
For ACS , ACSR, AAC conductors, and neoprene Vinyl coated type mainly for insulated conductor and telecom cable with layers.
* for Code HEDAN means Neoprene Vinyl coated.

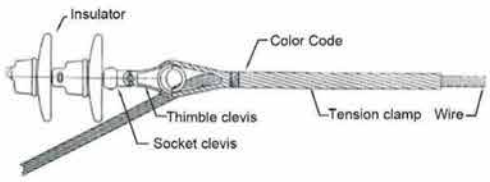
He Code	Dia. Range(mm)	Inch Size	Length(mm)	Color code
HEDA 062-066	6.20-6.60	1/4″	550	Red
HEDA 066-073	6.61-7.34		550	Blue
HEDA 073-082	7.35-8.26	5/16″	625	Yellow
HEDA 087-091	8.70-9.10		700	Green
HEDA 092-103	9.26-10.39	3/8″	685	Black
HEDA 104-116	10.4-11.68	7/16″	740	Red
HEDA 124-131	12.4-13.1	1/2″	760	Blue
HEDA 131-146	13.12-14.66	9/16″	880	Yellow
HEDA 146-165	14.67-16.59	5/8″	890	Green
HEDA 166-187	16.60-18.70		900	Black
HEDA 187-212	18.70-21.13	3/4″	917	Red
HEDA 199-223	21.21-22.55		1016	Blue
HEDA 212-240	23.00-25.50		1117	Yellow
HEDA 228-241	25.55-27.20	1″	1143	Green
HEDA 240-272	27.20-28.91		1194	Black
HEDA 272-307	28.93-31.08		1219	Red
HEDA 272-307	31.08-32.81		1244	Blue
HEDA 272-307	32.07-35.60		1295	Yellow

19.3.2 Preformed dead end tension clamp for steel stranded wire



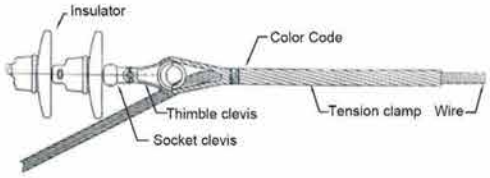
HE Code	Applicable cross section (mm2)	breaking force (CUTS)(kN)	Outer dia.of steel strand (mm)	Length (mm)	Weight (kg)	Color code	Thimble No.
YJG-25G	25	29.2 5	6. 60	635	0.21		TC-02
YJG-35G	35	40.9 5	7. 80	711	0.3		TC-02
YJG-50G	50	58.5 0	9. 00	901	0.54		TC-02
YJG-70G	70	81.9 0	11 .00	1020	0.84		TC-02
YJG-95G	95	111. 15	12 .50	1340	1.82		TC-50
YJG-100G	100	117. 00	13 .00	1340	1.83		TC-50
YJG-120G	120	140. 40	14 .00	1460	2.42		TC-07

19.3.3 Preformed dead end tension clamp for aluminum clad steel strand



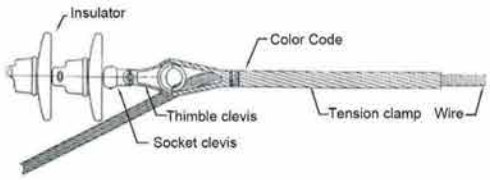
HE Code	Breaking force (CUTS)(kN)	Length (mm)	Weight (kg)	Color code	Thimble No.
YJLG-10	10	720	0.17	Green	TC-02
YJLG-15	15	720	0.17	Green	TC-02
YJLG-20	20	720	0.25	Green	TC-02
YJLG-25	25	800	0.38	Green	TC-02
YJLG-30	30	850	0.54	Green	TC-50
YJLG-35	35	900	0.74	Green	TC-50
YJLG-40	40	1000	0.83	Green	TC-07
YJLG-45	45	1050	0.87	Green	TC-07
YJLG-50	50	1100	0.91	Green	TC-07
YJLG-55	55	1100	1.13	Green	TC-07
YJLG-60	60	1150	1.19	Green	TC-07
YJLG-65	65	1200	1.24	Green	TC-07
YJLG-70	70	1250	1.29	Green	TC-07
YJLG-75	75	1250	1.63	Green	TC-10
YJLG-80	80	1200	1.88	Green	TC-10
YJLG-85	85	1250	1.96	Green	TC-10
YJLG-90	90	1300	2.04	Green	TC-10
YJLG-95	95	1350	2.12	Green	TC-10
YJLG-100	100	1400	2.19	Green	TC-10
YJLG-110	110	1450	2.65	Green	TC-10
YJLG-120	120	1500	2.74	Green	TC-12

19.3.4 Preformed dead end tension clamp for aluminum stranded wire



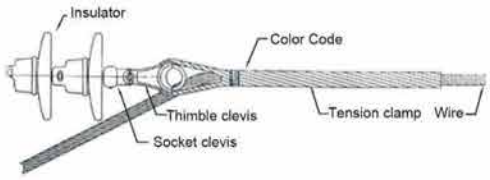
HE Code	LGJ/LGJF GB/T1179-1983		Length (mm)	Weight (kg)	Color code	Thimble No.
	Standard cross-section aluminum/steel (mm)	Outer Dia.(mm)				
YJLJ-16	16	5.1	410	0.16	Green	TC-02
YJLJ-25	25	6.45	460	0.16	Green	TC-02
YJLJ-35	35	7.5	635	0.16	Green	TC-02
YJLJ-50	50	9	700	0.25	Green	TC-50
YJLJ-70	70	10.8	780	0.36	Green	TC-50
YJLJ-95	95	12.48	800	0.37	Green	TC-07
YJLJ-120	120	14.25	880	0.55	Green	TC-07
YJLJ-150	150	15.75	890	0.72	Green	TC-07
YJLJ-185	185	17.5	1020	1.04	Green	TC-07
YJLJ-210	210	18.75	1020	1.04	Green	TC-07
YJLJ-240	240	20	1160	1.79	Green	TC-07
YJLJ-300	300	22.4	1270	2.3	Green	TC-07
YJLJ-400	400	25.9	1430	2.98	Green	TC-10
YJLJ-500	500	29.12	1660	5.3	Green	TC-10

19.3.5 Preformed dead end tension clamp for steel core aluminum stranded wire



HE Code	LGJ/LGJF GB/T1179-1983		Length (mm)	Weight (kg)	Color code	Thimble No.
	Standard cross-section aluminum/steel (mm)	Outer Dia.(mm)				
YJGL-16-3	16/3	5.55	460	0.17	Green	TC-02
YJGL-25-4	25/4	6.96	560	0.17	Green	TC-02
YJGL-35-6	35/6	8.16	635	0.17	Green	TC-02
YJGL-50-8	50/8	9.6	700	0.24	Green	TC-50
YJGL-70-10	70/10	11.4	780	0.36	Green	TC-50
YJGL-50-30	50/30	11.6	780	0.36	Green	TC-50
YJGL-70-40	70/40	13.6	880	0.54	Green	TC-07
YJGL-95-15	95/15	13.61	880	0.54	Green	TC-07
YJGL-95-20	95/20	13.87	880	0.54	Green	TC-07
YJGL-120-7	120/7	14.5	880	0.54	Green	TC-07
YJGL-120-20	120/20	15.07	890	0.71	Green	TC-07
YJGL-95-55	95/55	16	890	0.71	Green	TC-10
YJGL-120 -25	120 /25	15.74	890	0.71	Green	TC-07
YJGL-150-8	150/8	16	890	0.71	Green	TC-07
YJGL-150-20	150/20	16.67	1020	1.23	Green	TC-07
YJGL-150-25	150/25	17.1	1020	1.23	Green	TC-07
YJGL-150-35	150/35	17.5	1020	1.55	Green	TC-07
YJGL-120-70	120/70	18	1020	1.55	Green	TC-10
YJGL-185-10	185/10	18	1020	1.02	Green	TC-10
YJGL-185-25	185/25	18.9	1160	1.77	Green	TC-10
YJGL-185-30	185/30	18.88	1160	1.77	Green	TC-10
YJGL-210-10	210/10	19	1160	1.66	Green	TC-10
YJGL-185-45	185/45	19.6	1160	1.77	Green	TC-10
YJGL-210-25	210/25	19.98	1160	1.77	Green	TC-10
YJGL-210-35	210/35	20.38	1160	1.77	Green	TC-10
YJGL-210-50	210/50	20.86	1160	1.77	Green	TC-10
YJGL-240-30	240/30	21.6	1270	1.26	Green	TC-10
YJGL-240-40	240/40	21.66	1270	1.26	Green	TC-10
YJGL-240-55	240/55	22.4	1270	1.26	Green	TC-12
YJGL-300-15	300/15	23.01	1270	1.26	Green	TC-12
YJGL-300-20	300/20	23.43	1270	1.26	Green	TC-12
YJGL-300-25	300/25	23.76	1270	1.26	Green	TC-12
YJGL-300-40	300/40	23.94	1270	1.26	Green	TC-12
YJGL-300-50	300/50	24.26	1430	2.92	Green	TC-12
YJGL-300-70	300/70	25.2	1430	2.92	Green	TC-16
YJGL-400-20	400/20	26.91	1430	3.16	Green	TC-16
YJGL-400-25	400/25	26.64	1430	3.16	Green	TC-16
YJGL-400-35	400/35	26.82	1430	3.16	Green	TC-16
YJGL-400-50	400/50	27.63	1660	4.53	Green	TC-16
YJGL-400-65	400/65	28	1660	4.53	Green	TC-16
YJGL-400-95	400/95	29.14	1660	4.53	Green	TC-21
YJGL-500-35	500/35	30	1660	4.54	Green	TC-21
YJGL-500-45	500/45	30	1660	4.54	Green	TC-21

19.3.6 Preformed dead end tension clamp for insulated wires



HE Code	JKLYJ GB14049-1983		Length (mm)	Weight (kg)	Color code	Thimble No.
	Cross-section (mm2)	Outer Dia.(mm)				
YJJY-35	35	14.80	890	0.73	Green	TC-02
YJJY-50	50	16.10	980	1.01	Green	TC-02
YJJY-70	70	17.80	980	1.21	Green	TC-50
YJJY-95	95	19.60	1020	1.60	Green	TC-50
YJJY-120	120	21.00	1020	1.61	Green	TC-07
YJJY-150	150	22.60	1020	1.89	Green	TC-07
YJJY-185	185	24.20	1020	2.51	Green	TC-07
YJJY-240	240	26.40	1020	2.71	Green	TC-10
YJJY-300	300	28.60	1020	4.61	Green	TC-12

19.4 PVC Insulator Tie

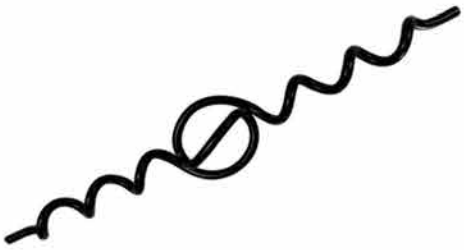
PVC Distribution Ties:

PVC Distribution Ties are to connect conductors with insulators in the distribution line.

There are two types based on the way of installation: one is the Top PVC Distribution Tie, which is to secure the conductors to the top groove of the insulators. Another is Side PVC Distribution Tie that secures the conductors to the side R groove of the insulator. The product is made of highly elastic PVC, which can effectively prevent the insulated conductors from slipping out of the insulator during operation.

According to working life and operation environment, it is divided into Ordinary PVC Distribution Ties and High-strength Semi-conductor PVC Distribution Ties.

19.4.1 Single Top Tie



HE Code	For neck(mm)	cable dia.(mm)	Length
STT-57-0751-1017	Ø54-59(Ø57)	7.51-10.17	660
STT-57-1018-1373	Ø54-59(Ø57)	10.18-13.73	660
STT-57-1374-1855	Ø54-59(Ø57)	13.74-18.55	711
STT-57-1856-2338	Ø54-59(Ø57)	18.56-23.38	787
STT-57-2339-2795	Ø54-59(Ø57)	23.39-27.95	860
STT-57-2796-3300	Ø54-59(Ø57)	27.96-33.00	965
STT-73-0751-1017	Ø70-76(Ø73)	7.51-10.17	660
STT-73-1018-1373	Ø70-76(Ø73)	10.18-13.73	660
STT-73-1374-1855	Ø70-76(Ø73)	13.74-18.55	711
STT-73-1856-2338	Ø70-76(Ø73)	18.56-23.38	787
STT-73-2339-2795	Ø70-76(Ø73)	23.39-27.95	860
STT-73-2796-3300	Ø70-76(Ø73)	27.96-33.00	965

19.4.2 Double Top Tie

HE Code	For neck(mm)	cable dia.(mm)	Length
HEALT-57-0751-1017	Ø54-59(Ø57)	7.51-10.17	380
HEALT-57-1018-1373	Ø54-59(Ø57)	10.18-13.73	410
HEALT-57-1374-1855	Ø54-59(Ø57)	13.74-18.55	430
HEALT-57-1856-2338	Ø54-59(Ø57)	18.56-23.38	430
HEALT-57-2339-2795	Ø54-59(Ø57)	23.39-27.95	450
HEALT-57-2796-3300	Ø54-59(Ø57)	27.96-33.00	480
HEALT-73-0751-1017	Ø70-76(Ø73)	7.51-10.17	380
HEALT-73-1018-1373	Ø70-76(Ø73)	10.18-13.73	410
HEALT-73-1374-1855	Ø70-76(Ø73)	13.74-18.55	430
HEALT-73-1856-2338	Ø70-76(Ø73)	18.56-23.38	430
HEALT-73-2339-2795	Ø70-76(Ø73)	23.39-27.95	450
HEALT-73-2796-3300	Ø70-76(Ø73)	27.96-33.00	480

19.4.3 Double Side Tie

HE Code	For neck(mm)	cable dia.(mm)	Length
SST-57-0751-1017	Ø54-59(Ø57)	7.51-10.17	533
SST-57-1018-1373	Ø54-59(Ø57)	10.18-13.73	533
SST-57-1374-1855	Ø54-59(Ø57)	13.74-18.55	559
SST-57-1856-2338	Ø54-59(Ø57)	18.56-23.38	610
SST-57-2339-2795	Ø54-59(Ø57)	23.39-27.95	686
SST-57-2796-3300	Ø54-59(Ø57)	27.96-33.00	762
SST-73-0751-1017	Ø70-76(Ø73)	7.51-10.17	533
SST-73-1018-1373	Ø70-76(Ø73)	10.18-13.73	533
SST-73-1374-1855	Ø70-76(Ø73)	13.74-18.55	559
SST-73-1856-2338	Ø70-76(Ø73)	18.56-23.38	610
SST-73-2339-2795	Ø70-76(Ø73)	23.39-27.95	686
SST-73-2796-3300	Ø70-76(Ø73)	27.96-33.00	762

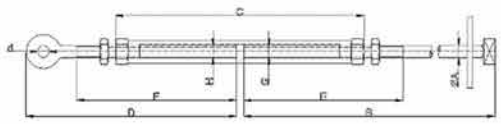
Raw material: PVC Core
Finish: Plain or semi conductive

Stay Rod Assembly

20.1 Stay Rod Adjustable

The function of the stay wire is to make the tensile balance to the pole and increase the stability of it.
And the stay anchor rod is designed to fix the wire to the earth, by connecting the wire by using thimble guy clip and anchor plate inserted in the earth.
In order to prevent the line from being damaged by strong wind loads, or in order to increase the stability of the pole in the area with soft soil, the cable should also be installed.
Manta anchor is designed to be inserted into the earth without digging

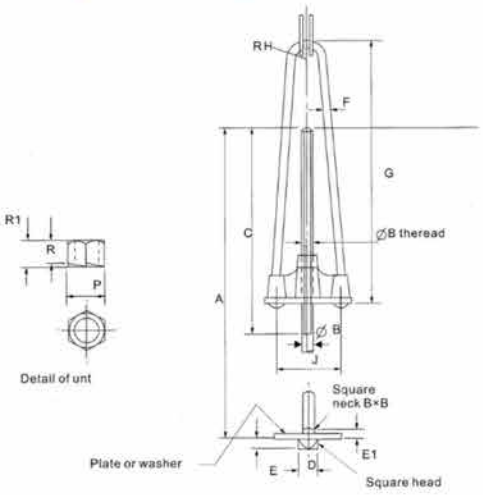
20.1.1 Tube turnbuckle type:



HE Code	Dimensions inch						Wt. (KGs)	Ultimate strength (KN)
	A	B	C	D	E	F		
HESR-1620	16	2000	350	300	230	230	5.2	54
HESR-1824	18	2400	400	300	230	230	7.9	65
HESR-2024	20	2400	400	300	230	230	8.8	85
HESR-2224	22	3000	400	300	230	230	10.5	110

Surface treatment: steel hot dip galvanized

20.1.2 Adjustable bow type:

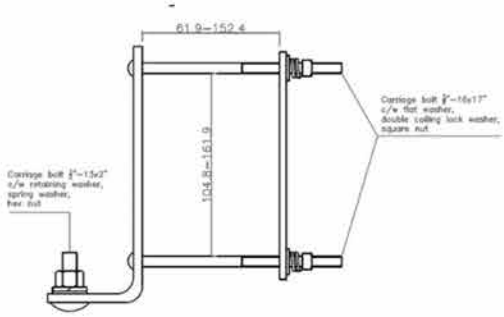


HE Code	Dimensions(mm)										
	A	B	C	E	E'	F	G	H	P	R	R'
PM12	1400	12	230	25.4	12	10	300	12	23	13	R+2.5
PM16	1800	16	300	31.8	16	12	400	16	27.5	16	R+2.5
PM20	2400	20	300	38.1	20	12	400	20	33	19.5	R+2.5
PM24	2400	24	300	44.5	24	16	425	24	42	25.5	R+2.5

Surface treatment: steel hot dip galvanized

Steel Supports on Pole

21.1 Arrester Bracket



L crossarm brackets are produced to mount a variety of apparatus on crossarms or poles .
Brackets can be mounted with the vertical equipment running either up or down the pole.
Brackets are assembled with carriage bolts and washers, such as arrester or fuse cutout.

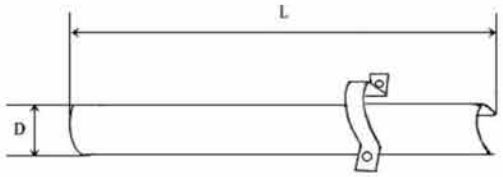
HE Code
LB11-16

Material steel ASTM A663 or A675 is hot dip galvanized to ASTM A153.

21.2 Cable Guards and Straps

1, U cable guards:

U cable guards are produced to protect erected power and telephone cables, lines or wires at bottom end of poles.
Cable guards are made of 14-gauge hot dip galvanized steel in shape U.
Guards are shaped to fit standard PVC cable covers.
Guards are available with or without a covered vent hole.

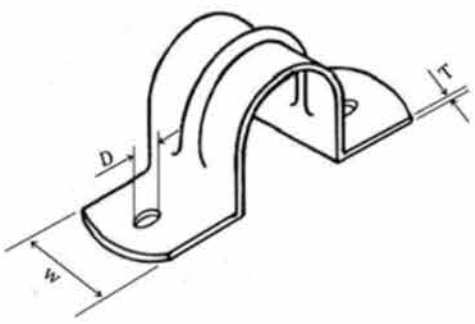


HE Code	Dimensions		Wt.
	L feet	D in.	kg
UCG5-118	5′	1 1/8	2.18
UCG5-2316	5′	2 3/16	3.9
UCG5-3316	5′	3 3/16	6.92
UCG8-34	8′	3/4	2.18
UCG8-118	8′	1 1/8	2.54
UCG8-114	8′	1 1/4	3.45
UCG8-2316	8′	2 3/16	5.72
UCG8-214	8′	2 1/4	5.9
UCG8-3316	8′	3 3/16	8.16
UCG8-314	8′	3 1/4	9.07
UCG8-31116	8′	3 11/16	10.29

2, Straps:
Straps are designed to attach cable guards or ground wire to poles, fastened by lag screws or nails.
Straps are made from hot dip galvanized flat steel, shaped to fit the guards.

HE Code	Dimensions		Wt. kg
	Steel size	Hole dia.	
CGS932-01	1/8" x 3/4"	9/32"	0.058
CGS932-02	3/32" x 3/4"	9/32"	0.03
CGS1132-01	3/16" x 1"	11/32"	0.288

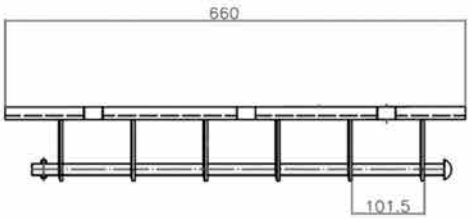
3, mounting strap:



HE Code	Name	Dimensions(in)		
		D	W	T
MS516	mounting strap	5/16″	9/16″	1/25″

21.3 Secondary Racks

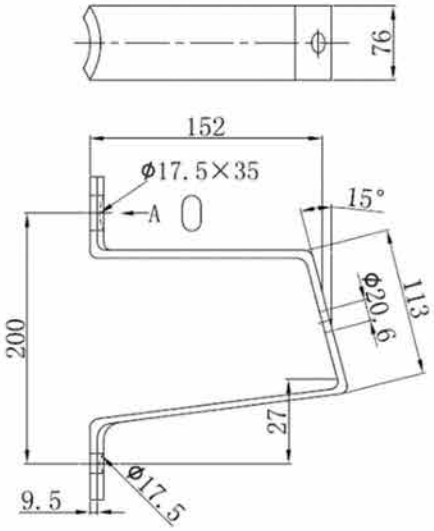
Secondary racks are made of heavy-duty channel steel, assembled with cotter pins or through pins.
Racks and rack base are welded together.
Racks are designed for 2/3/4 spool insulators.



HE Code	Thickness	Weight	Bolt Dia	Insulator Qty
HESR-4001	4mm	0.28	9mm	1
HESR-5001	5mm	0.62	12mm	1
HESR-3002	3mm	0.77	9mm	2
HESR-5002	5mm	1.53	12mm	2
HESR-4003	4mm	1.45	12mm	3
HESR-5003	5mm	3	16mm	3
HESR-4004	4mm	2.35	12mm	4
HESR-5004	5mm	3.55	12mm	4

Material is SAE1020, hot dip galvanized to ASTM A153.

21.4 Side Post installing Brackets



Side post insulator brackets are produced to mount distribution or transmission side post insulators on the pole side to increase conductor clearance or give added climbing space.
For round poles, bracket base is curved as pole-shape in order to establish a contour fit to the pole. Flat mounting base is also available at request.

HE Code
SPB1116

Raw material: ductile iron
Finish: hot dip galvanized according with ASTM A153

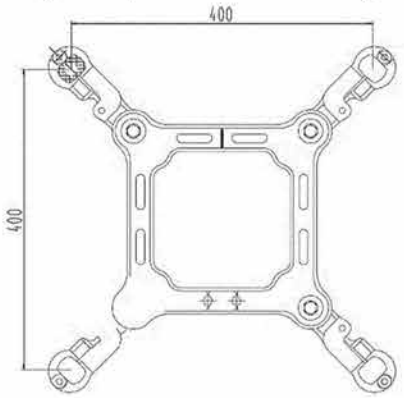
Spacers and Vibration Dampers

22.1 Spacer Dampers

22.1.1 Conductor Spacer

Spacer dampers are used for twin bundles, triple bundles, quad bundles, AAC, AAAC, ACSR, AACSR conductors at overhead lines to maintain the sub conductor spacing and carry current connection.

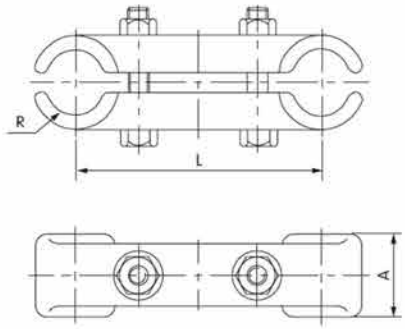
Dampers are produced to withstand the forces and movements under the influence of wind, ice loadings, galloping and short circuiting forces, without either causing damage to the sub conductors or sustaining damage themselves.



HE Code	Conductor	Dimensions		Wt.
	mm^2	L	R	kg
SSD-1	300	400	9.7	7.8
SSD-2	300	400	10.6	7.8
SSD-3	400	400	12	7.8
SSD-4	400	400	11.4	7.8
SSD-5	400	400	12.6	7.8

Material: aluminum alloy, steel, silicon rubber
Surface treatment: steel hot dip galvanized

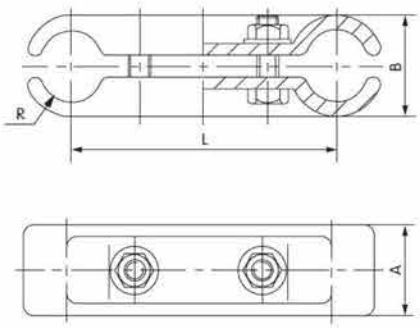
22.1.2 Spacers For Double bus-bar Conductor



HE Code	Suitable Conductor Dia.(mm)	Main dimensions(mm)			Weight (kg)
		A	L	R	
SDBC-4-120	19.02~21.28	50	120	11	0.4
SDBC-5-120	23.70~27.36	60	120	14	0.6
SDBC-6-120	30.16~33.20	70	120	17	0.7
SDBC-4-200	19.02~21.28	50	200	11	0.9
SDBC-5-200	23.70~27.36	60	200	14	1`
SDBC-6-200	30.16~33.20	70	200	17	1.2
SDBC-4-400	19.02~21.28	50	400	11	2.1
SDBC-5-400	23.70~27.36	60	400	14	2.5
SDBC-6-400	30.16~33.20	70	400	17	2.8

The clamp is aluminum alloy, the other parts are hot-dip galvanized steel.

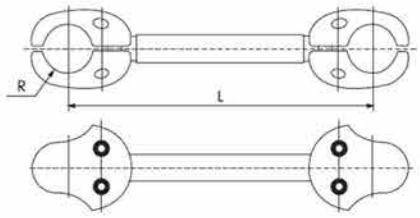
22.1.3 Spacers For Double bus-bar Conductor



HE Code	Suitable Conductor Dia.(mm)	Main dimensions(mm)				Weight (kg)
		A	B	L	R	
SDBC-600K-120	LGKK-600	50	68	120	26	0.7
SDBC-600K-200	LGKK-600	60	70	200	26	2.2
SDBC-600K-400	LGKK-600	60	70	400	26	2.5
SDBC-600K-450	LGKK-900	60	70	450	26	3.3
SDBC-900K-120	LGKK-900	50	65	120	26	0.7
SDBC-900K-200	LGKK-900	50	68	200	26	2.2
SDBC-900K-400	LGKK-900	50	68	400	26	2.5
SDBC-900K-450	LGKK-1400	50	68	450	26	3.3
SDBC-1400K-400	LGKK-1400	70	83	400	29	3.5
SDBC-1400-120	LGJQT-1400	50	68	120	26	0.7
SDBC-1400-200	LGJQT-1400	50	68	200	26	2.2
SDBC-1400-400	LGJQT-1400	60	70	400	26	2.5
SDBC-1400-450	LGJQT-1440	60	70	450	26	3.3
SDBC-1440N-200	NAHLGJQ-1400	60	70	200	26	2.2
SDBC-1440N-400	NAHLGJQ-1400	60	70	400	26	2.5

The clamp is aluminum alloy, the other parts are hot-dip galvanized steel.

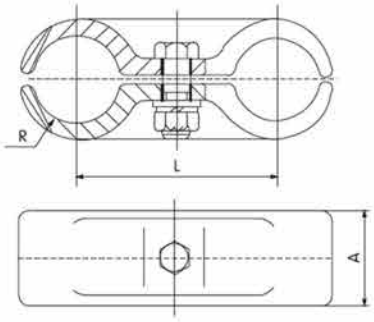
22.1.4 Spacers For Double bus-bar Conductor



HE Code	Suitable Conductor Dia.(mm)	Main dimensions(mm)		Weight (kg)
		L	R	
SDBC-51-200	LGKK-600	200	26	1.9
SDBC-51-400	LGKK-600	400	26	2
SDBC-49-400	LGKK-900	400	25	2

The clamp is aluminum alloy, the other parts are hot-dip galvanized steel.

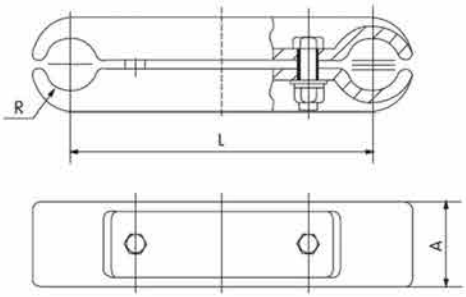
22.1.5 Spacers For Double bus-bar Conductor



1, Spacers For Double bus-bar Conductor

HE Code	Suitable Conductor Dia.(mm)	Main dimensions(mm)			Weight (kg)
		A	L	R	
SBCM-400N-120	27.4	50	120	14	0.7
SBCM-51-120	52	60	120	26.5	0.9
SBCM-900K-120	49	50	120	25	0.7

The clamp is aluminum alloy, the other parts are hot-dip galvanized steel.

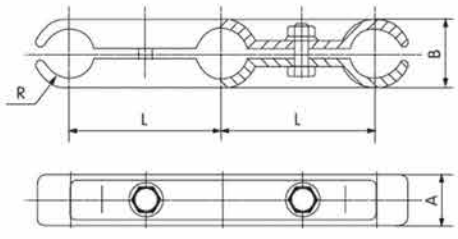


2, Spacers For Double bus-bar Conductor

HE Code	Suitable Conductor Dia.(mm)	Main dimensions(mm)			Weight (kg)
		A	L	R	
SBCM-400-200	27.4	60	200	14	1.5
SBCM-400N-200	27.4	50	200	14	1.6
SBCM-630N-200	35	65	200	18	1.8
SBCM-900K-200	49	50	200	25	1.7
SBCM-1000K-200	42.1	60	200	21.5	1.8
SBCM-51-200	52	60	200	26	1.9
SBCM-57-200	56	75	200	28.5	2
SBCM-400N-400	27.4	50	400	14	2
SBCM-630N-400	35	65	400	18	2.2
SBCM-900K-400	49	50	400	25	2.3
SBCM-51-400	52	60	400	26.5	2.5
SBCM-51-400GHB	51	70	400	26	2.8
SBCM-57-400	56	75	400	28.5	3

The clamp is aluminum alloy, the other parts are hot-dip galvanized steel.

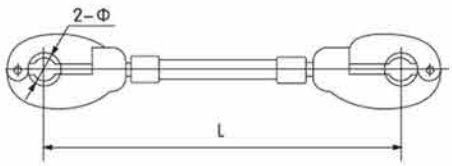
22.1.6 Spacers for three-bundle Conductor



HE Code	Suitable Conductor Dia.(mm)	Main dimensions(mm)			Weight (kg)
		A	L	R	
SFTC-600K-120	LGJ-240	50	44	200	1.5
SFTC-600K-200	LGJKK-600	50	68	120	2.7
SFTC-1400-120				200	2.7
SFTC-1400-200	LGJQT-1400	50	68	120	2.2
SFTC-1440N-200				200	2.7
SFTC-600K-120	NAHLGJQ-1440	60	70	200	2.7

The clamp is aluminum alloy, the other parts are hot-dip galvanized steel.

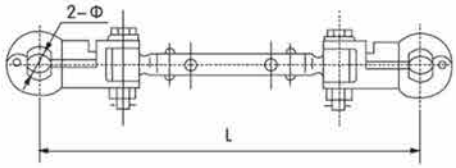
22.1.7 Spacer dampers for double conductor



HE Code	Suitable Conductor Dia.(mm)	Main dimensions(mm)		Weight (kg)
		L	Φ	
SDDC-45-300	LGJ-300	450	22.5	2.6
SDDC-45-400	LGJ-400	450	27.5	2.5
SDDC-45-500	LGJ-500	450	28.2	3.1

The body and keepers are aluminum alloy, dampers are elastomer, the other parts are hot-dip galvanized steel.

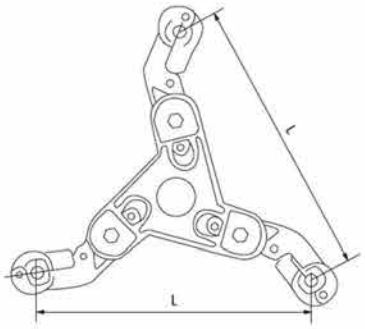
22.1.8 Spacer-Dampers



HE Code	Suitable Conductor Dia.(mm)	Main dimensions(mm)		Weight (kg)
		L	Φ	
HESD-240-300	LGJ-300/40 - 50	400	20 -24	3.1
HESD-240-400	LGJ-400/35 -40	400	20 -24	3.1

The body and keepers are aluminum alloy, dampers are elastomer, the other parts are hot-dip galvanized steel.

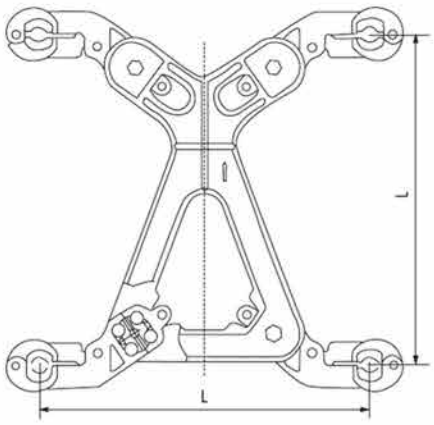
22.1.9 Spacer-dampers for Three-bundle conductor(330kV line)



HE Code	Suitable Conductor Dia.(mm)	Main dimensions(mm)	Weight (kg)
		L	
SDZC-35185	LGJ-185/25,30.45	350	3.5
SDZC-35210	LGJ-210/25,35,50	350	3.5
SDZC-35240	LGJ-240/30,40,55	350	3.5

The body and keepers are aluminum alloy, dampers are elastomer, the other parts are hot-dip galvanized steel.

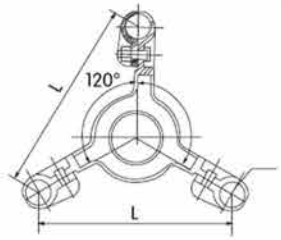
22.1.10 Spacer-dampers for Four-bundle conductor(330kV line)



HE Code	Suitable Conductor Dia.(mm)	Main dimensions(mm)	Weight (kg)
		L	
SDFC-35150	LGJ-150/20,25,35	350	4.6
SDFC-35185	LGJ-185/25,30.45	350	4.6
SDFC-35210	LGJ-210/25,35,50	350	4.6
SDFC-35240	LGJ-240/30,40,55	350	4.6

The body and keepers are aluminum alloy, dampers are elastomer, the other parts are hot-dip galvanized steel.

22.1.11 Spacers for three-bundle conductor

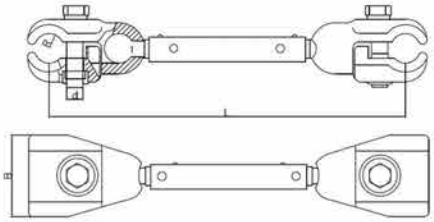


HE Code	Suitable Conductor Dia.(mm)	Main dimensions(mm)		Weight (kg)
		L	R	
SHEALC-51-400Y	51	400	25	3.5

The bodies are aluminum alloy, the other parts are hot-dip galvanized steel.

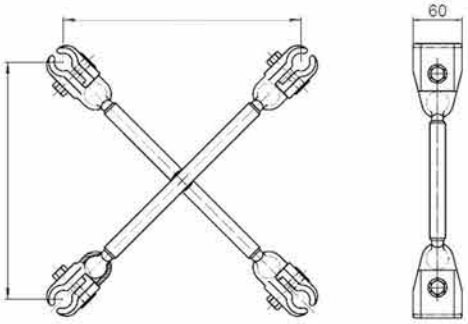
22.2 Jumper Spacer

Spacer dampers are used for twin bundles, triple bundles, quad bundles, AAC, AAAC, ACSR, AACSR conductors at overhead lines to maintain the sub conductor spacing and carry current connection.



HE Code	Conductor	Dimensions		Wt.
	mm²	L	R	kg
FJQ-1	185-240	200	11	0.85
FJQ-2	300-400	200	14.5	1.05
FJQ-3	185-240	400	11	1.00
FJQ-4	300-400	400	14.5	1.20
FJQ-5	120-150	400	9.5	1.00
FJQ-6	300-400	450	15.4	2.43

Material: aluminum alloy, steel, silicon rubber
Surface treatment: steel hot dip galvanized



HE Code	Conductor dia.	Dimensions		Wt.
	mm	L	W	kg
FJQ4-405	27	400	400	2.56
FJQ4-406	31	400	400	2.58

22.3 Spiral Vibration Dampers

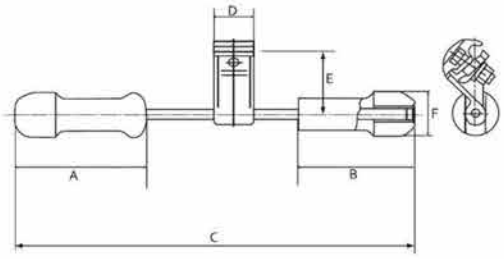
Spiral vibration dampers are produced for use on conductors and guy wires, especially effective for use on small diameter conductors and earth wires.
They are to reduce aeolian vibration by working as an interference device for the aeolian vibration place.

HE Code	Cable dia.	Space distance	Length	Type
	mm	mm	mm	
SDVR-1	9.1-11	300	1350	Standard corrosion resistant
SDVR-2	11.1-13	300	1350	Standard corrosion resistant
SDVR-3	13.1-15	300	1350	Standard corrosion resistant
SDVR-4	15.1-17	300	1350	Standard corrosion resistant
SDVR-5	17.1-19	300	1350	Standard corrosion resistant
SDVR-6	19.1-21	300	1350	Standard corrosion resistant

Raw material: ASTM A536
Finish: hot dip galvanized

22.4 Stockbridge Dampers

Stockbridge dampers are produced to dump the aeolic vibration of conductors and increase line tensions, so as that they reduce line maintenance costs.



HE Code	Conductor Range	Dimensions(mm)						Wt.
	mm	A	B	C	D	E	F	kg
FR-1	7-12	138	118	429	50	81	48	2.54
FR-2	11-20	138	118	429	50	81	48	2.61
FR-3	18-28	167	146	505	60	91	57	5
FR-4	26-36	218	163	550	60	97	64	6
FR-5	33-38	218	163	550	70	127	64	7.9
FR-6	36-40	325	325	650	70	127	74	11

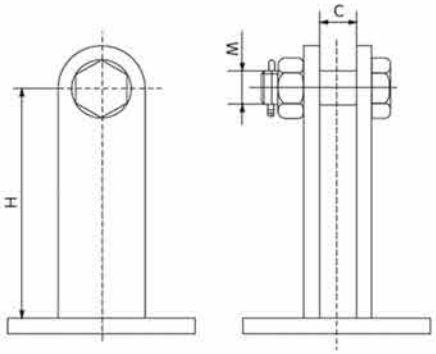
Material: zinc alloy, aluminum alloy, steel
Surface treatment: steel hot dip galvanized

HE Code	Fit wire diameter	Main dimensions(mm)			Weight (kg)
		L	H	a	
FRY-1G	6.4-8.6	280	45	40	1.5
FRY-2G	8.6-12.0	380	60	50	2.2
FRY-3G	12.0-14.5	480	65	60	4.2
FRY-12	12.0-16.0	429	80	50	2.8
FRY-2	12.0-16.0	429	80	50	2.8
FRY-23	16.0-18.0	429	80	50	2.8
FRY-34	18.0-22.5	505	90	60	4.5
FRY-35	22.5-30.0	505	90	60	5
FRY-45	22.5-30.0	550	97	60	7.6
FRY-46	30.0-35.0	550	97	60	7.6

Clamp is aluminum alloy and counter weight is grey cast iron, painted. or hot-dip galvanized. The other parts are hot-dip galvanized steel.

22.5 Suspension counter weight

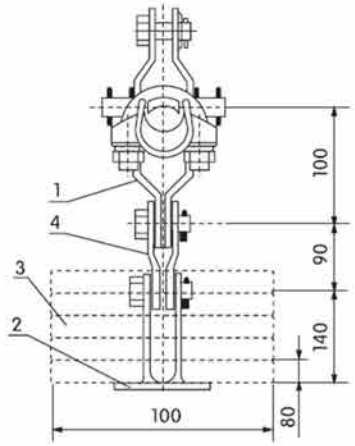
22.5.1 Suspension counter weight aluminum and accessories



HE Code	Main dimensions(mm)			Weight (kg)
	C	M	H	
XZC-15	20	16	140	15

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

22.5.2 Suspension counter weight aluminum and accessories

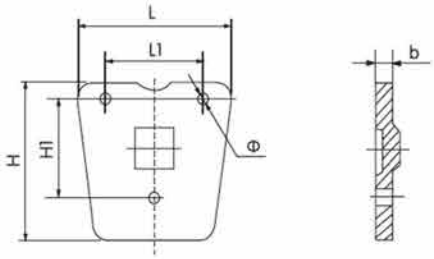


Order number	Name	HE Code	Weight (kg)	Use
1	counter weight clevis	CWC-1	0.28	Suitable for installation on XGU-4 suspension clamp
		CWC-2	0.29	Suitable for installation on XGU-5.6 suspension clamp
2	counter weight base	CWB-1	1.5	
3	Counter weight piece	CWP-1	15	
4	Parallel clevis	PCF-7	0.53	See link fittings

Counter weight piece is grey iron. Painted The other parts are hot-dip galvanized steel.

22.5.3 Counter weight

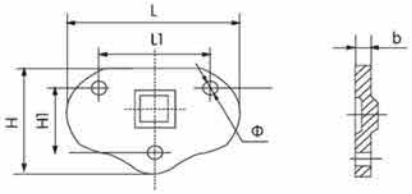
1, Counter weight



HE Code	Main dimensions(mm)						Weight (kg)
	L	L1l	H	H1	Φ	b	
HECW-10	225	185	190	150	18	20	10
HECW-18	350	240	300	220	24	30	21.8
HECW-18G	350	240	300	220	24	36	21.8
HECW-30	380	240	300	220	24	35	30

Counter weights are grey iron. Painted.

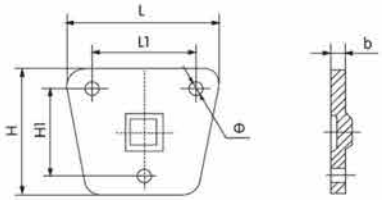
2, Counter weight



HE Code	Main dimensions(mm)						Weight (kg)
	L	L1	H	H1	Φ	b	
HECW-20	390	240	300	225	24	30	21.8

Counter weights are grey iron. Painted.

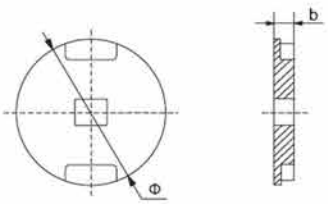
3, Counter weight



HE Code	Main dimensions(mm)						Weight (kg)
	L	Ll	H	H1	Φ	b	
HCWD-20	450	240	300	220	24	30	21.8

Counter weights are grey iron. Painted.

4, Counter weight



HE Code	Main dimensions(mm)		Weight (kg)
	Φ	b	
HECW-15Y	278	38	15

Counter weights are grey iron. Painted.

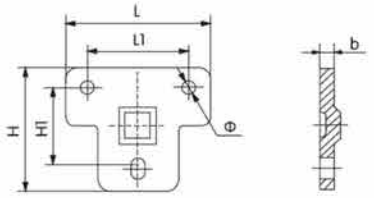


Fig.1

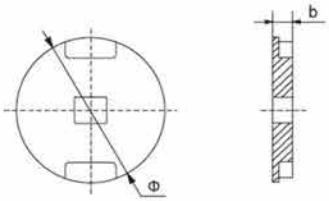


Fig.2

HE Code	Main dimensions(mm)						Fig No.	Weight (kg)
	L	LI	H	H1	Φ	b		
HCWT-10	300	120	230	220	20	34	1	10
HCWT-20	390	240	325	220	24	30	1	20
HCWT-15Y					280	38	2	15

22.6 Spiral Vibration Dampers For Optical Cable

This product is made of high-strength, aging-resistant PVC plastic and is commonly used for vibration reduction devices for ADSS optical cables and vibration protection in OPGW heavy ice areas.
According to the operating tension and span of ADSS optical cables, common configurations are shown in the table on the right:

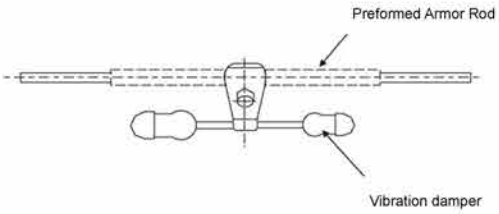
Span	Configuration quantity
＜100M	0
100-250	2
250-400	4
400-800	6
800-1000	8

HE Code	Applicable cable diameter (mm)	Clamping section length (mm)	Total length (mm)	Weight (kg)
FTL 0830 126	6.35-8.29	250	1260	0.22
FTL 1170 130	8.30-11.70	250	1300	0.28
FTL 1430 135	11.71-14.30	250	1350	0.3
FTL 1930 167	14.31-19.30	330	1670	0.66

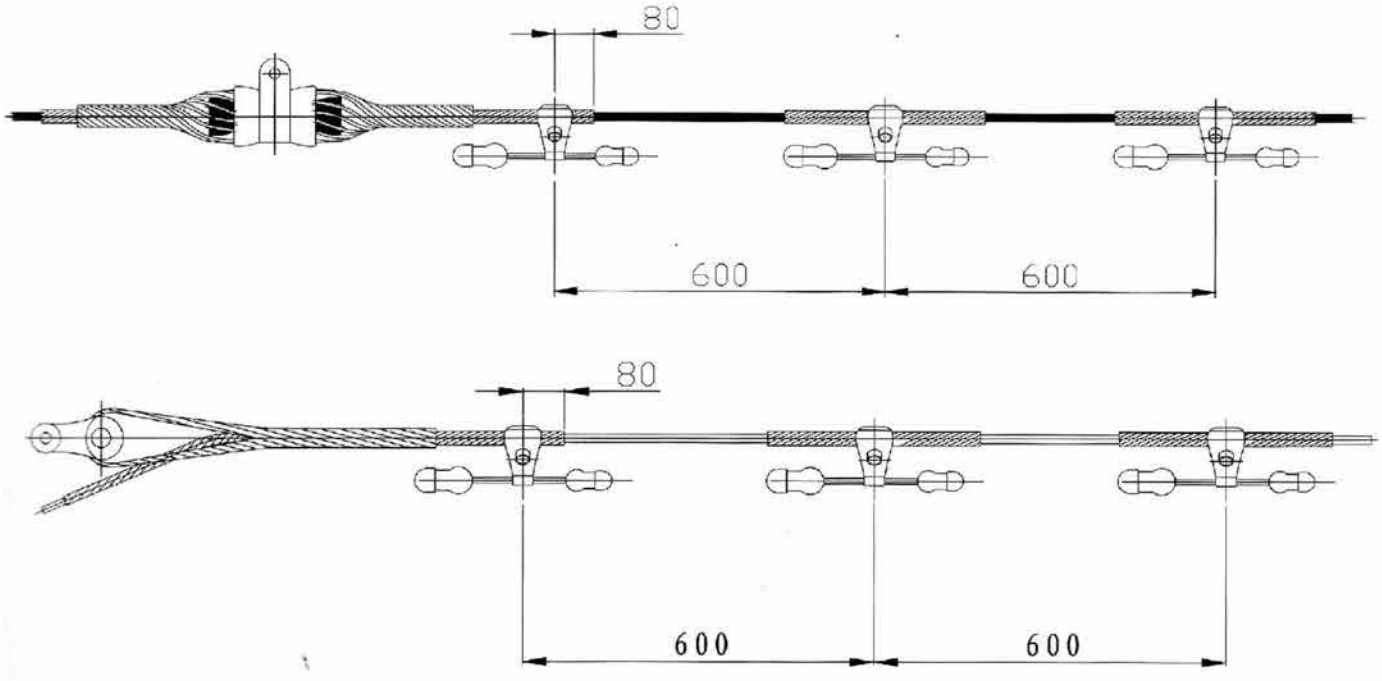
22.7 Vibration Dampers For Optical Cable

1,Vibration Damper

The HE4D series anti-vibration hammer is a Stockbridge tuning fork design with a multi-resonance acoustic vibration reduction device, which is mainly used to reduce and disperse the impact energy generated by breeze vibration on the optical cable.



HE Code	Clamping diameter range (mm)	Total length (m)	Clamp width (mm)	Weight (kg)
HE4D-1	27.0-22.3	383	52	2.5
HE4D-2	23.4-19.5	383	52	2.5
HE4D-3	20.3-16.5	383	52	2.5
HE4D-4	18.0-15.0	383	52	2.5
HE4D-5	16.0-14.0	383	52	2.5
HE4D-6	14.0-12.2	383	52	2.5
HE4D-7	27.0-22.3	330	52	1.4
HE4D-8	23.4-19.5	330	52	1.4
HE4D-9	20.3-16.5	330	52	1.4
HE4D-10	18.0-15.0	330	52	1.4
HE4D-11	16.0-14.0	330	52	1.4
HE4D-12	14.0-12.2	330	52	1.4

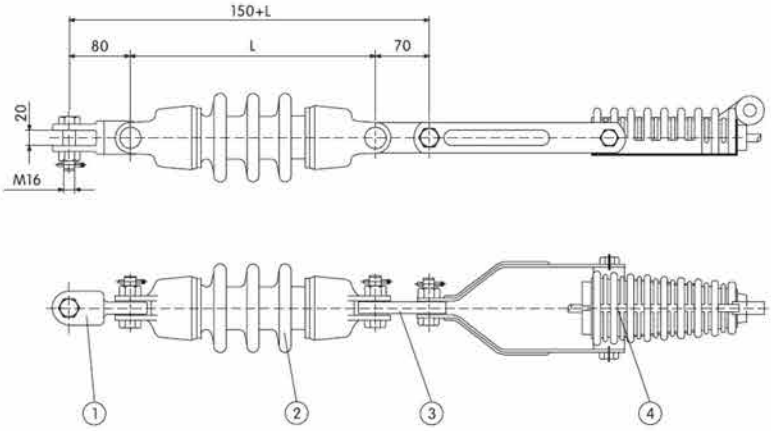


The direction of the hammer head of the Vibration Damper has nothing to do with the anti-vibration performance, and there is no relevant standard. According to the customary installation method in our country for many years, the large hammer head of the Vibration Damper is generally facing the direction of the tower.

Diagram

1, 10kV aerial insulation wire strain string installation drawing

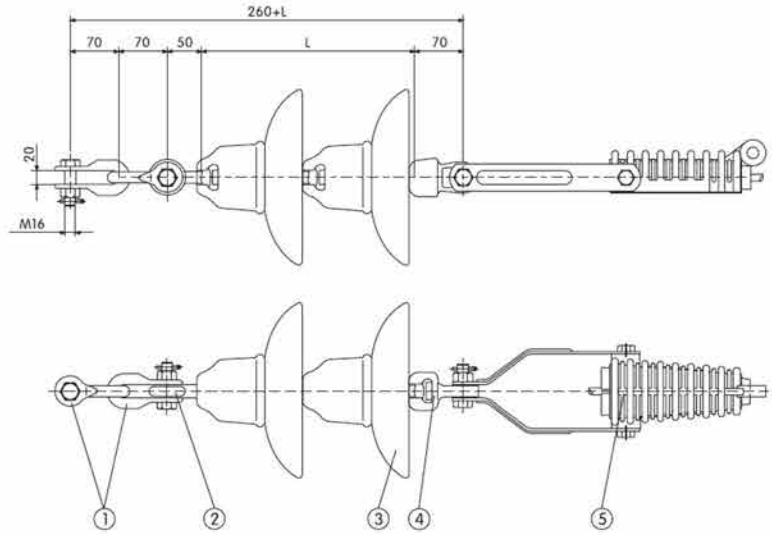
●70kN porcelain pull rod single hanging point tension string NXJG



70kN porcelain pull rod single hanging point tension string HEQNZ

No.	Name	Size	No.
1	Clevis	HEZD-1	1
2	Double iron head porcelain rod		1
3	Parallel Clevis	HESP-7	1
4	Wedge tension clamp	HEQNZ	1

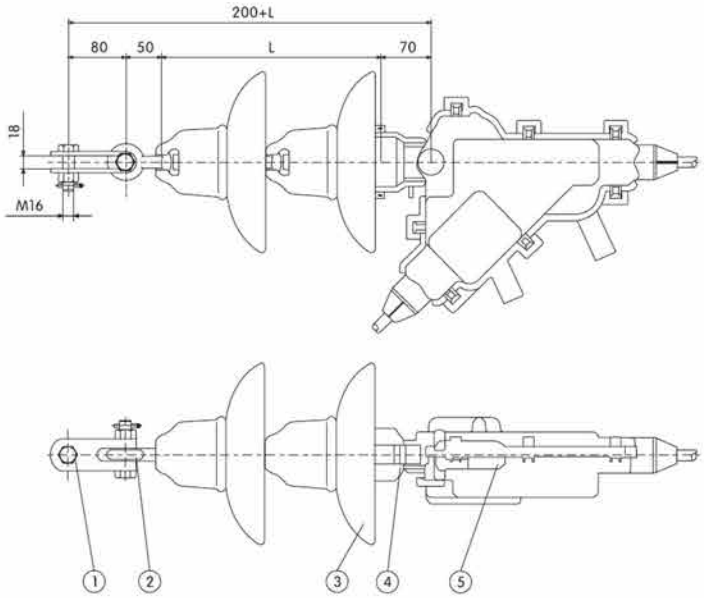
●70kN disc type suspension type insulators(composite) one of the single hanging point tension string HEQNZ



70kN disc type suspension type insulators (composite) one of the single hanging point tension string NXJG

No.	Name	Size	No.
1	U Shackle	HEUT-0770	2
2	Ball eye	QP-7	1
3	Insulator		
4	Socket clevis	HEW-7A	1
5	Wedge tension clamp	HEQNZ	1

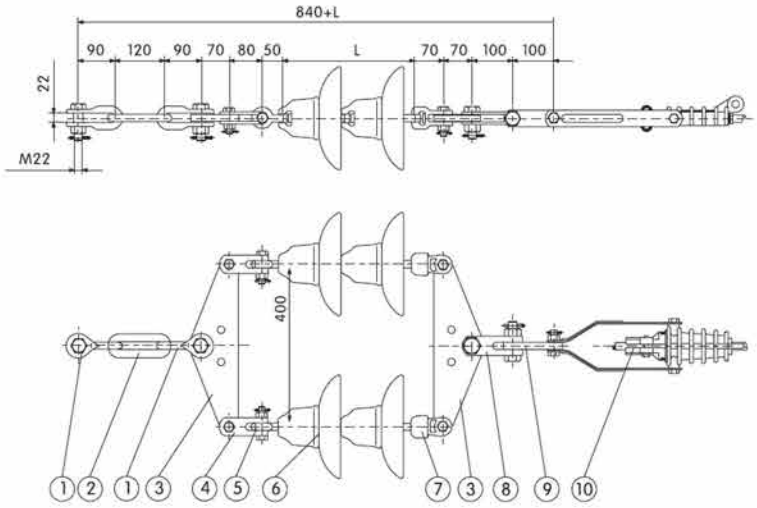
●70kN disc suspension insulators(composite)one of the single hanging point tension string



70kN disc suspension insulators(composite)one of the single hanging point tension string NXL

No.	Name	Size	No.
1	Z Clevis	HZC-7	1
2	Ball eye	QP-7	1
3	Insulator		
4	Socket clevis	HEW-7A	1
5	Wedge tension clamp		1

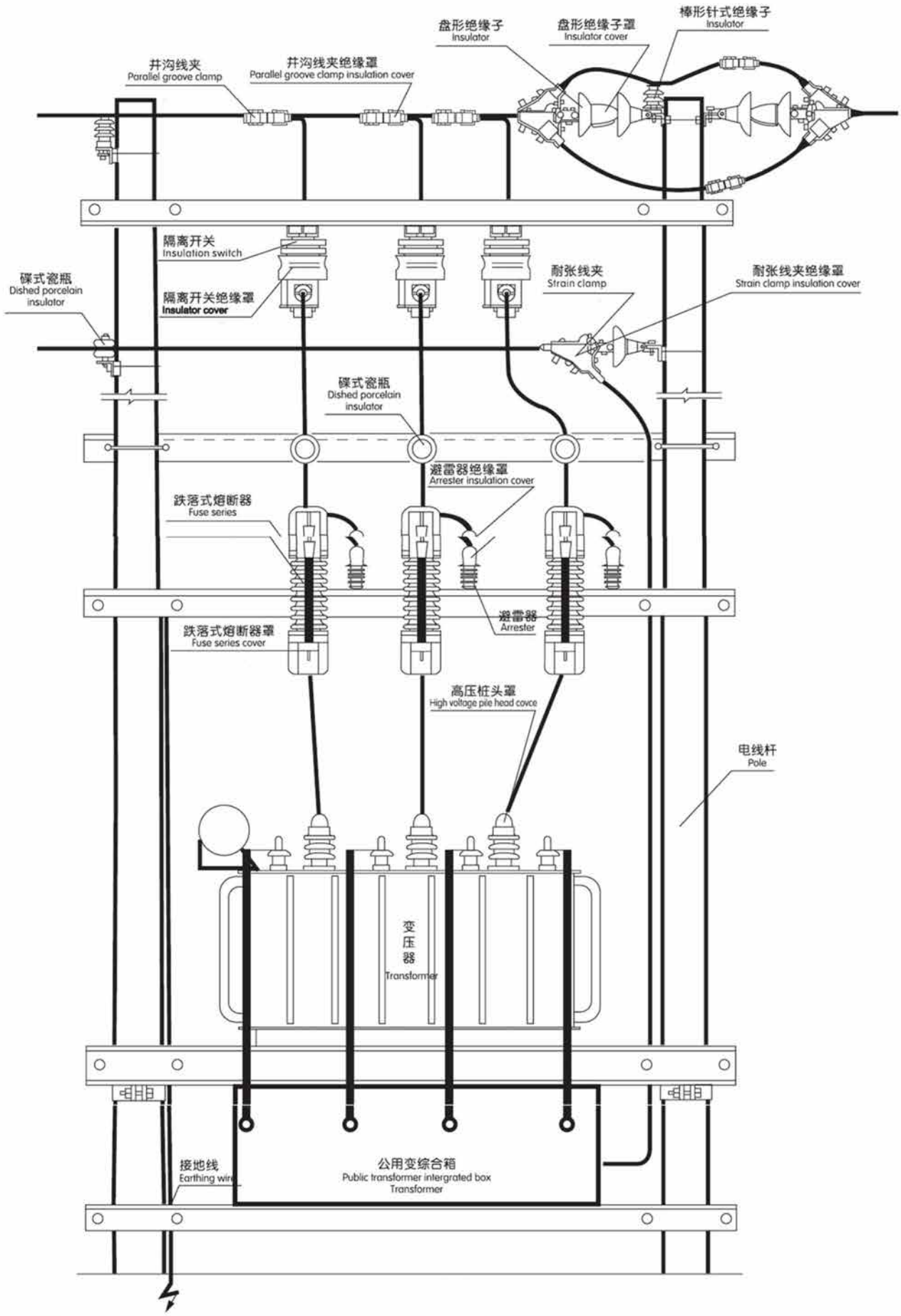
●70kN disc suspension insulators (composite) double single hanging point tension string

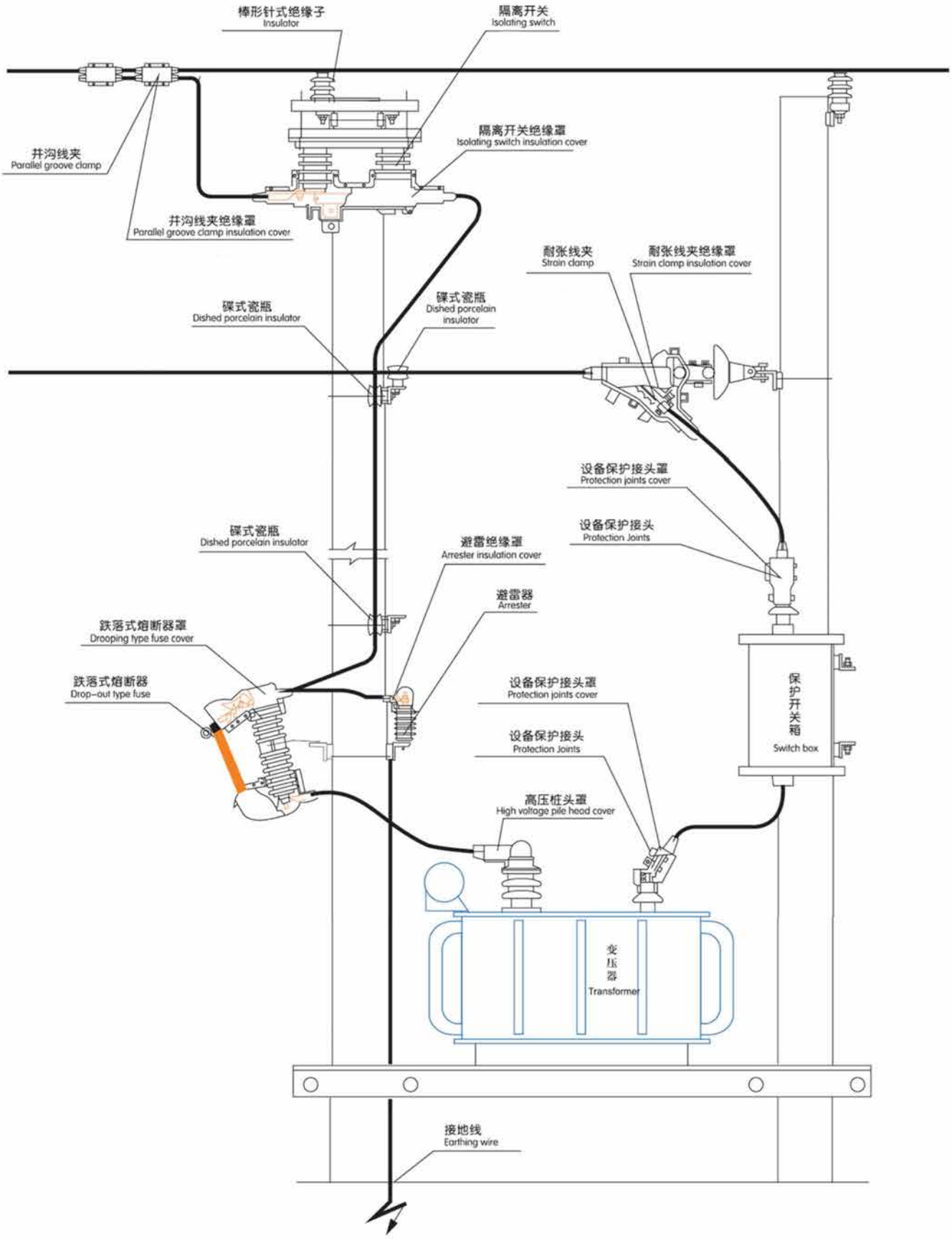


70kN disc suspension insulators (composite) double single hanging point tension string NXG

No.	Name	Size	No.
1	U Shackle	HEUT-1290	2
2	Ph Extension ring	HEYH-1212	1
3	Yoke plate	DYP-12-70/400	2
4	Z clevis	HZC-7	2
5	Ball eye	QP-7	2
6	Insulator		
7	Socket clevis	WCS-7	2
8	Z Clevis	HZC-12	1
9	PD Parallel Clevis	HESP-12	1
10	Wedge tension clamp		1

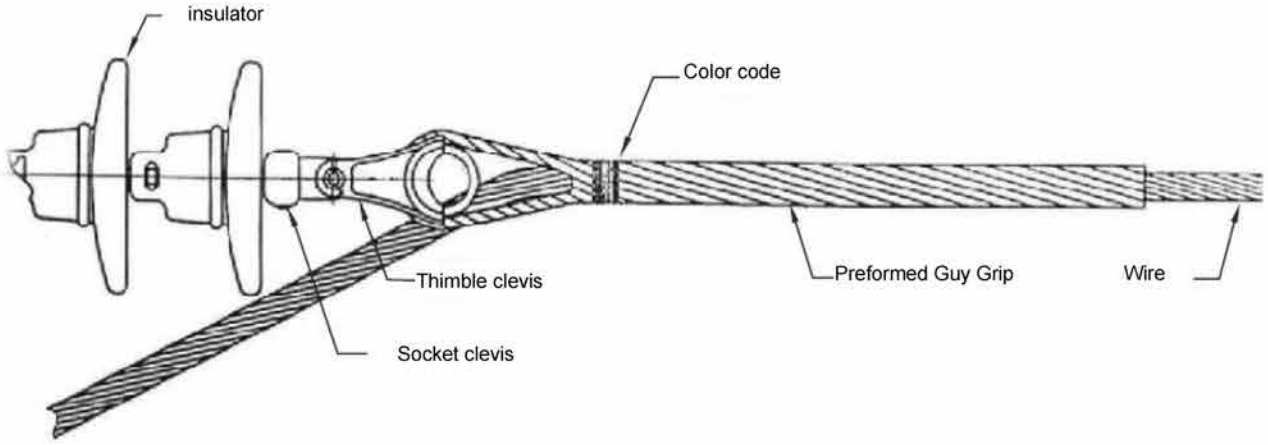
2,Transformer installation drawing on the pole



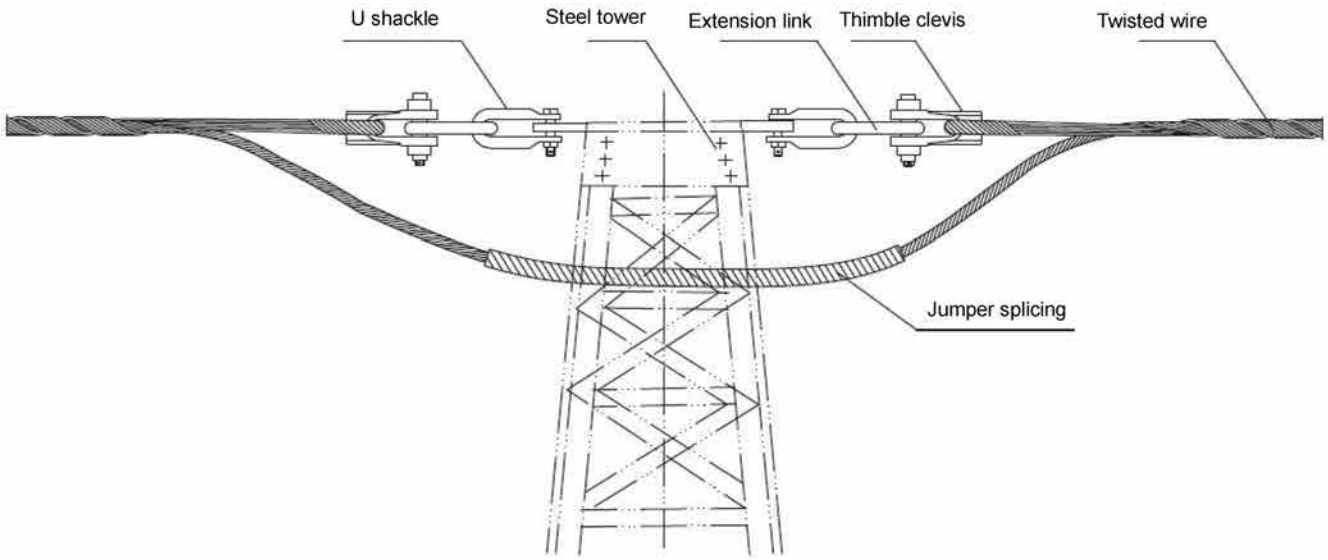

棒形针式绝缘子
Insulator
隔离开关
Isolating switch
井沟线夹
Parallel groove clamp
隔离开关绝缘罩
Isolating switch insulation cover
井沟线夹绝缘罩
Parallel groove clamp insulation cover
耐张线夹
Strain clamp
耐张线夹绝缘罩
Strain clamp insulation cover
碟式瓷瓶
Dished porcelain insulator
碟式瓷瓶
Dished porcelain insulator
设备保护接头罩
Protection joints cover
设备保护接头
Protection Joints
碟式瓷瓶
Dished porcelain insulator
避雷绝缘罩
Arrester insulation cover
避雷器
Arrester
跌落式熔断器罩
Drooping type fuse cover
跌落式熔断器
Drop-out type fuse
设备保护接头罩
Protection joints cover
设备保护接头
Protection Joints
保护开关箱
Switch box
高压桩头罩
High voltage pile head cover
变压器
Transformer
接地线
Earthing wire

3, Installation diagrams of tension clamp

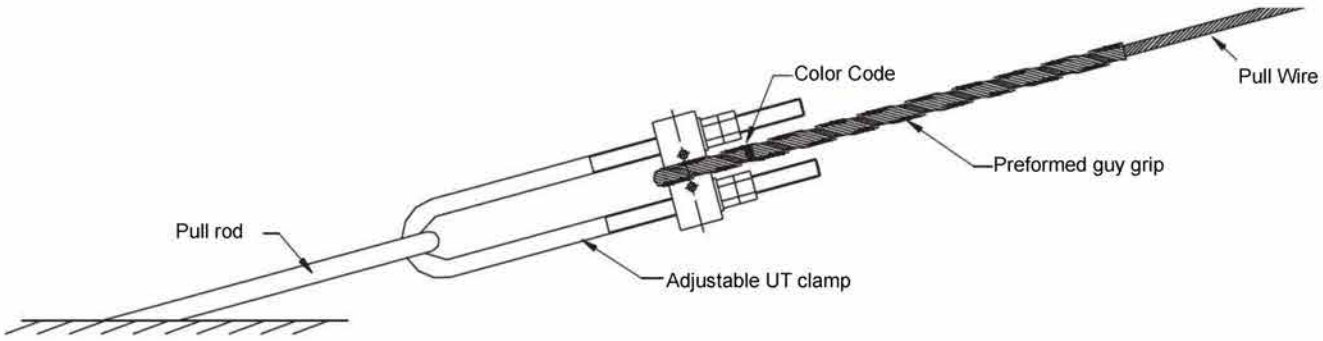
●Installation diagram of tension clamp on conductor



●Installation diagram of tension clamp on ground wire

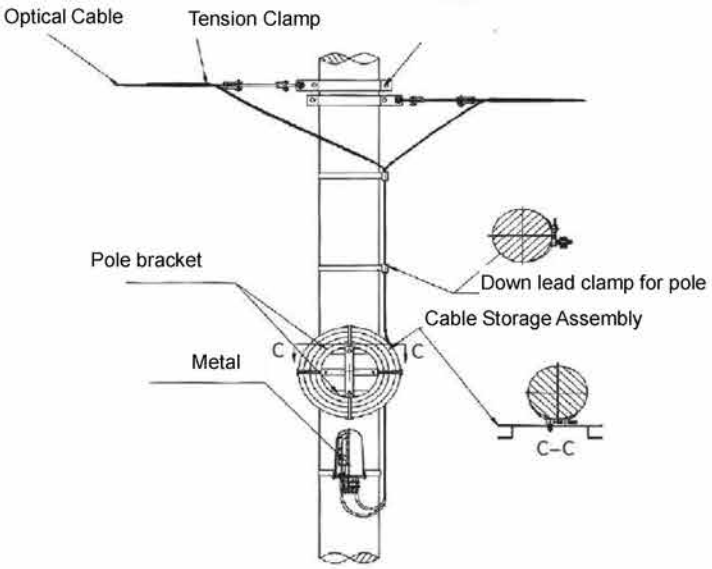


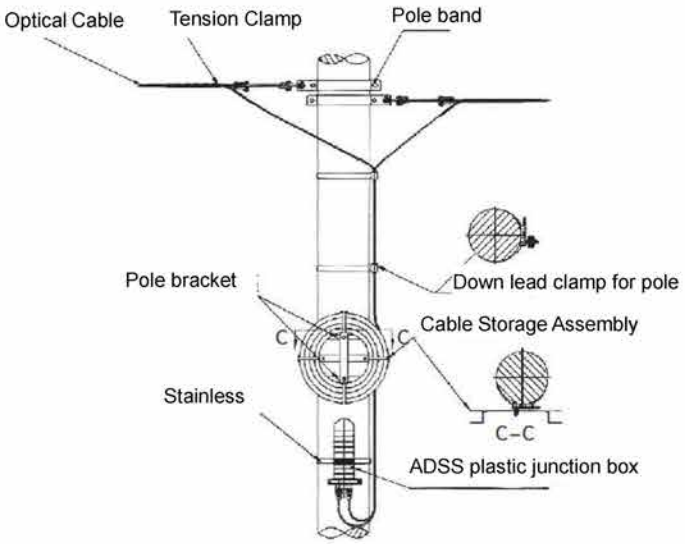
●Installation diagram of tension clamp as tension wire



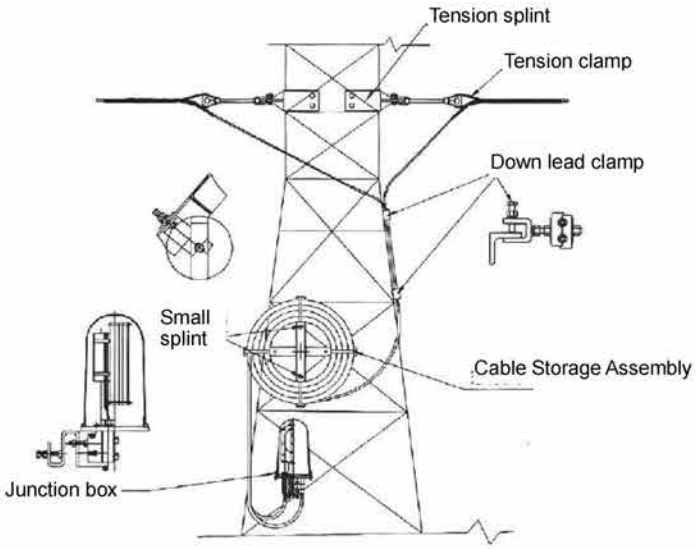
4, Schematic diagram of installation of Junction Box and Cable Storage Assembly

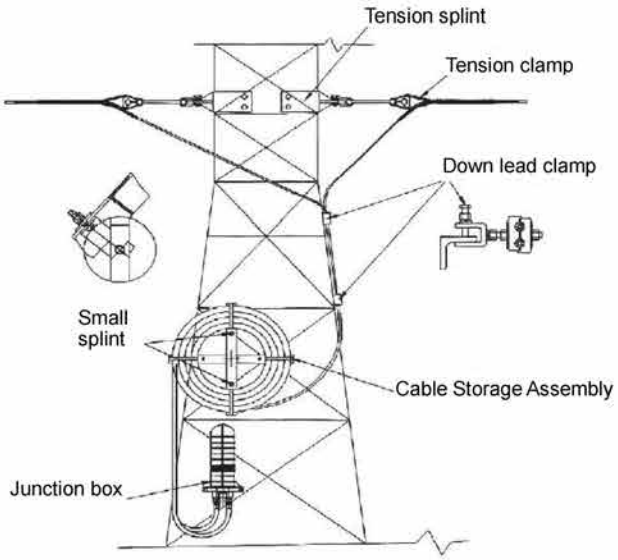
●Schematic diagram of installation of Junction Box and Cable Storage Assembly for pole



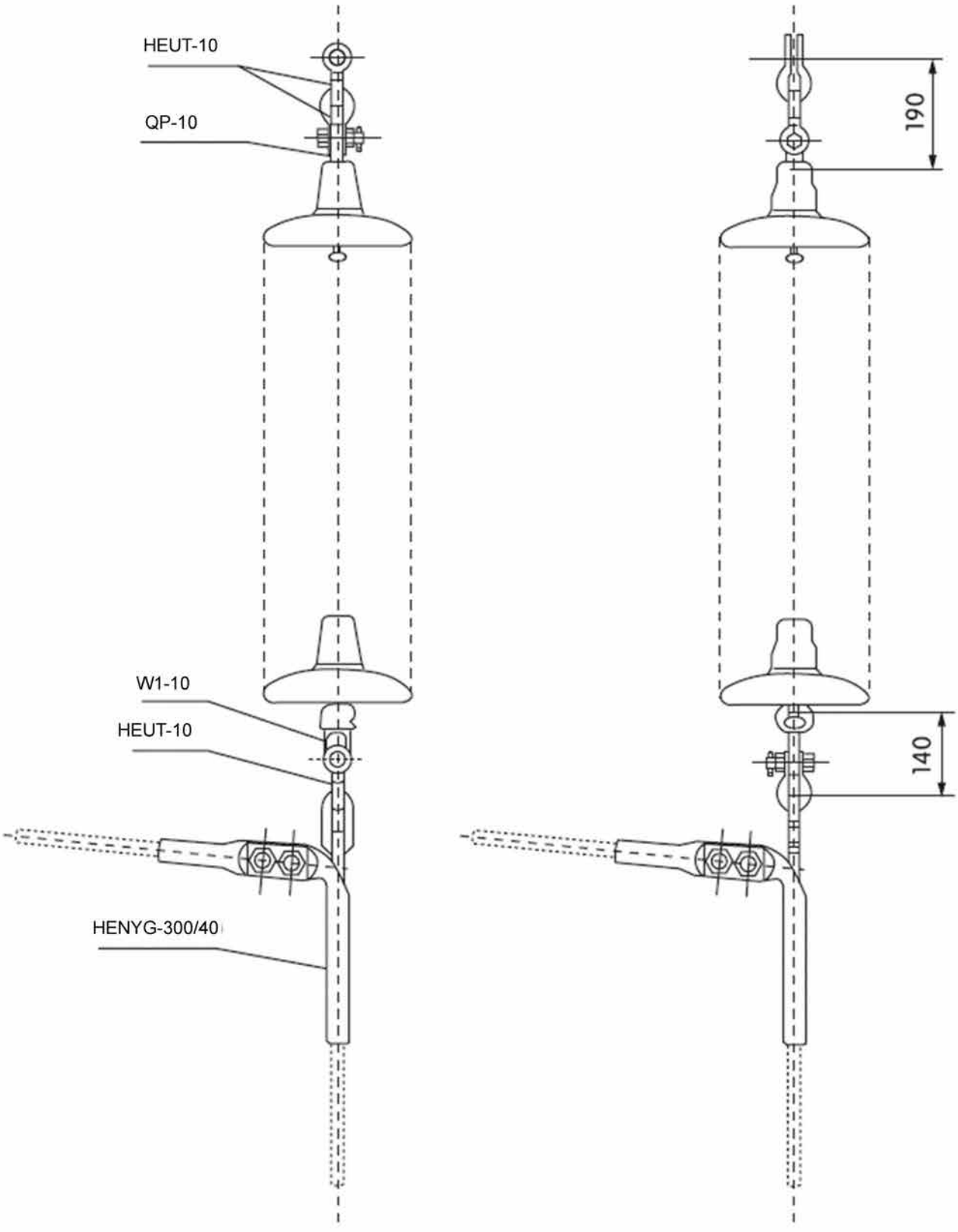


●Schematic diagram of installation of Junction Box and Cable Storage Assembly for tower

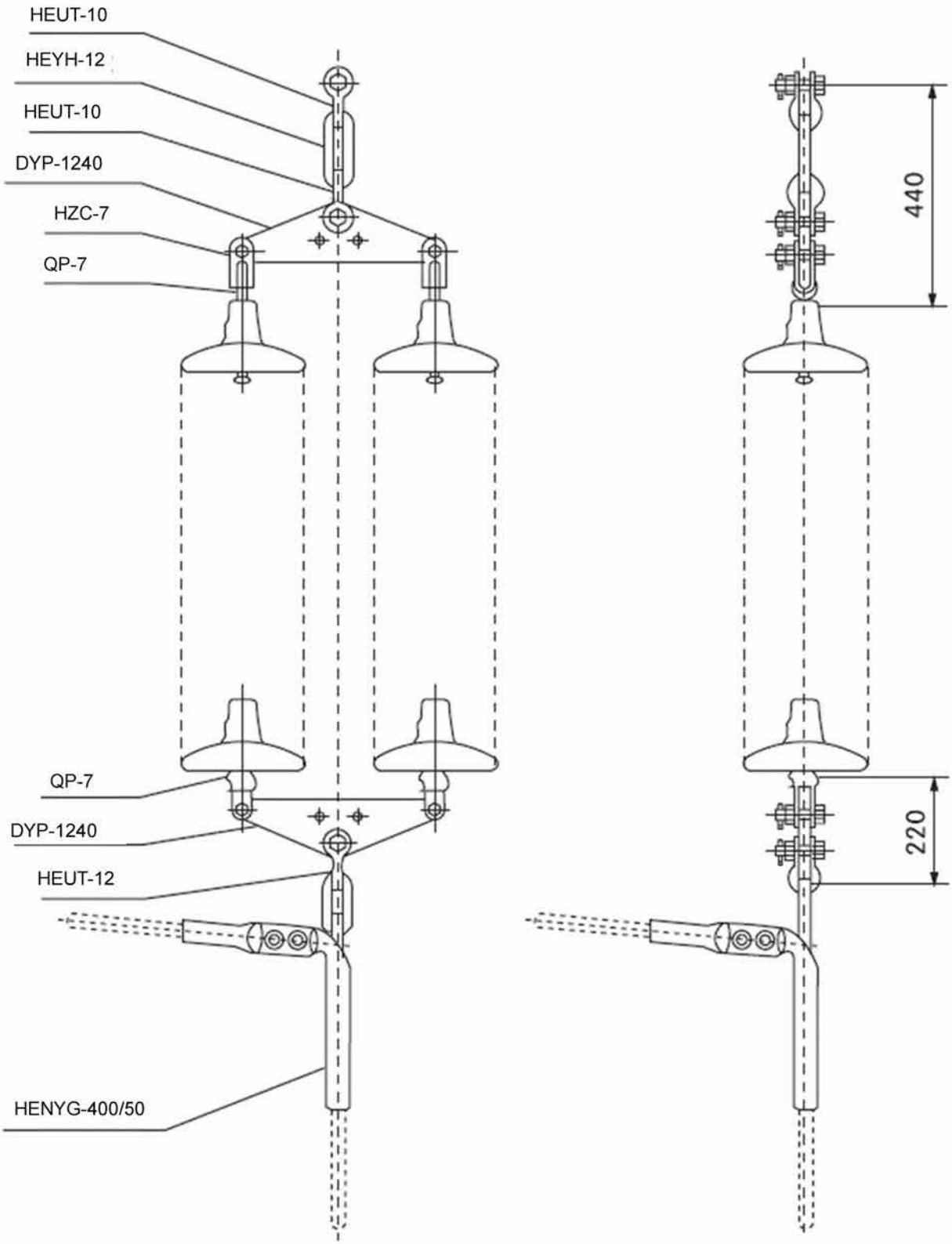




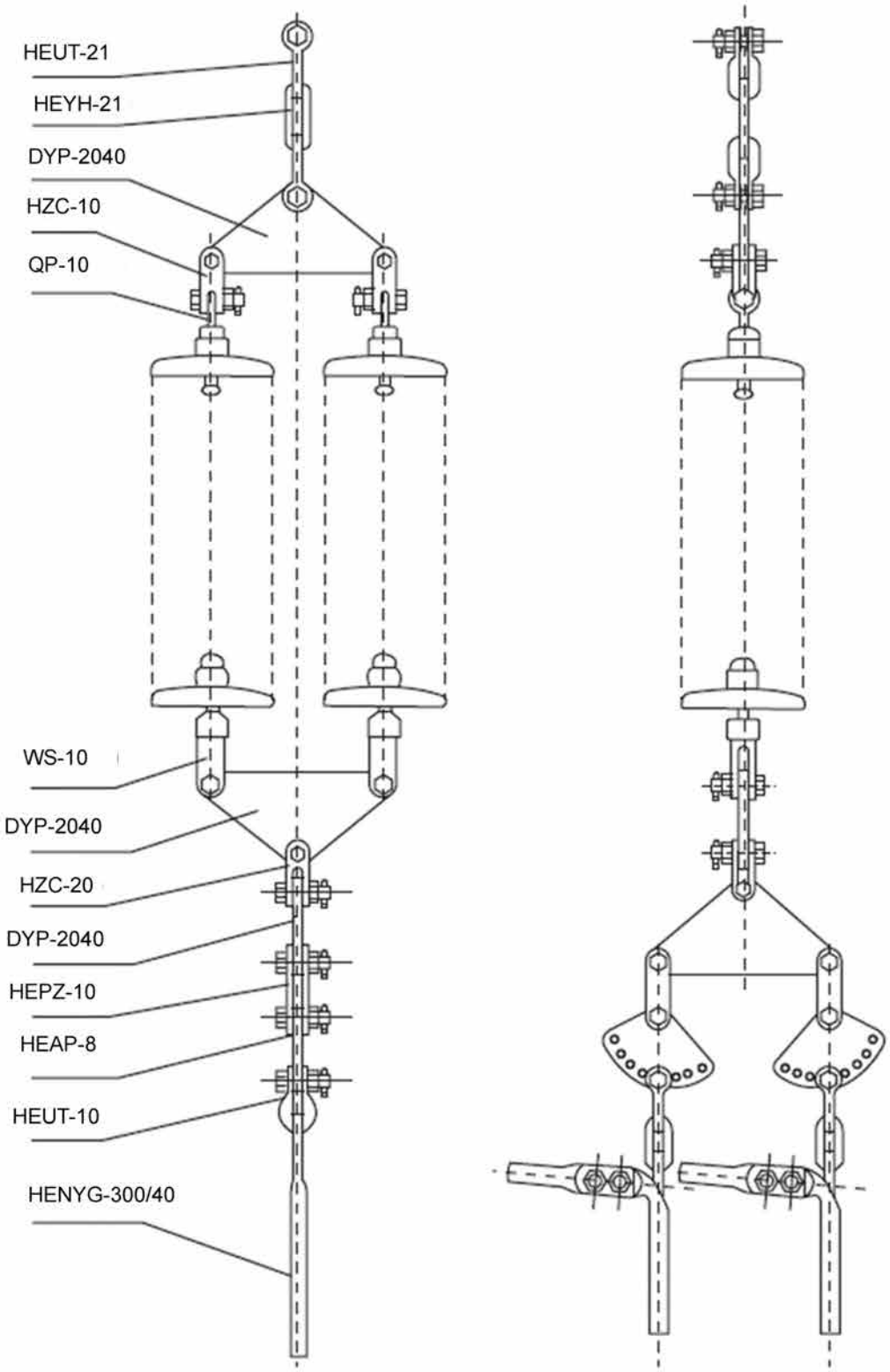
5, Appendix1: Single Tension String for One Conductor



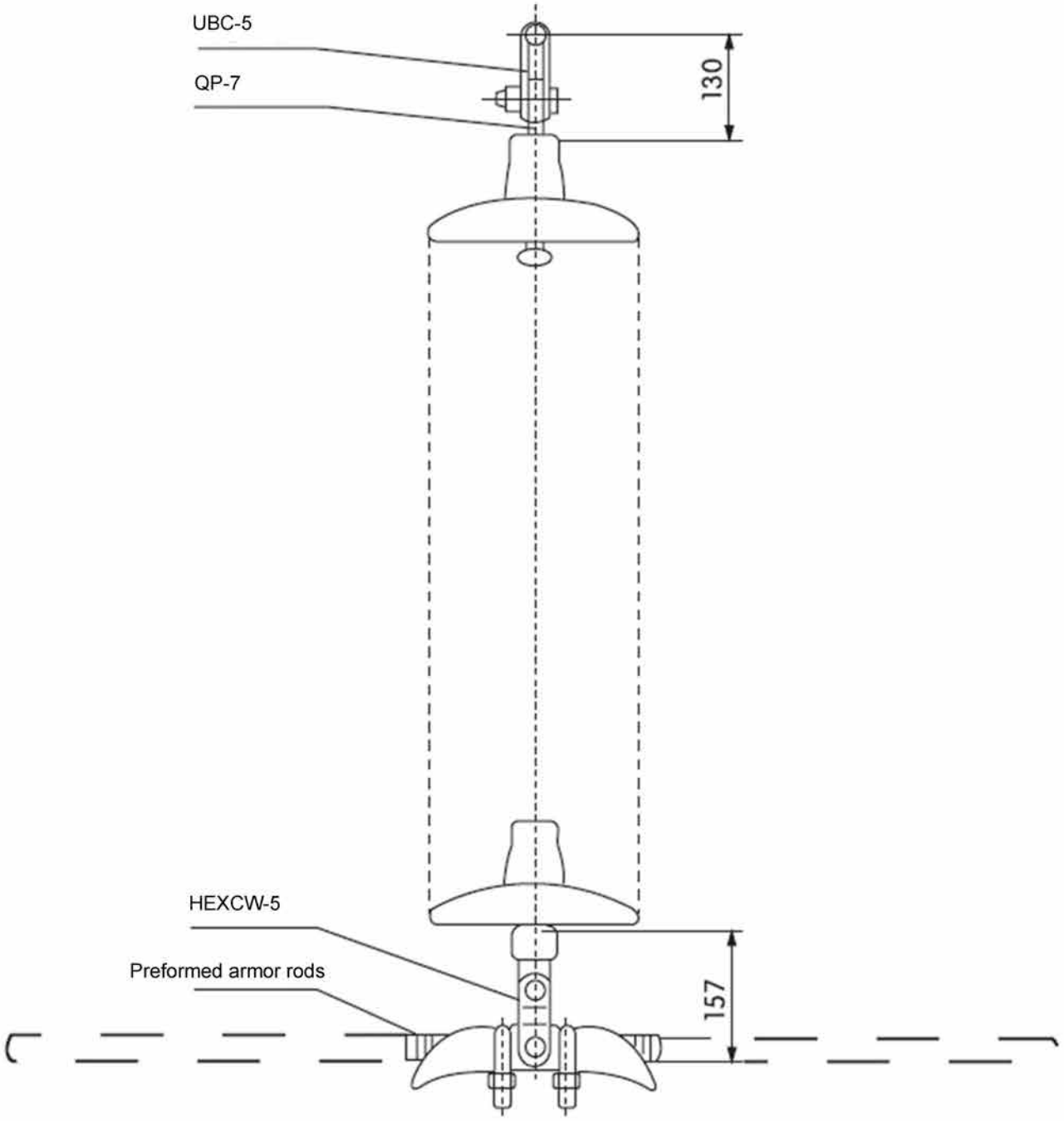
6, Appendix2: Double Tension Strings for One Conductor



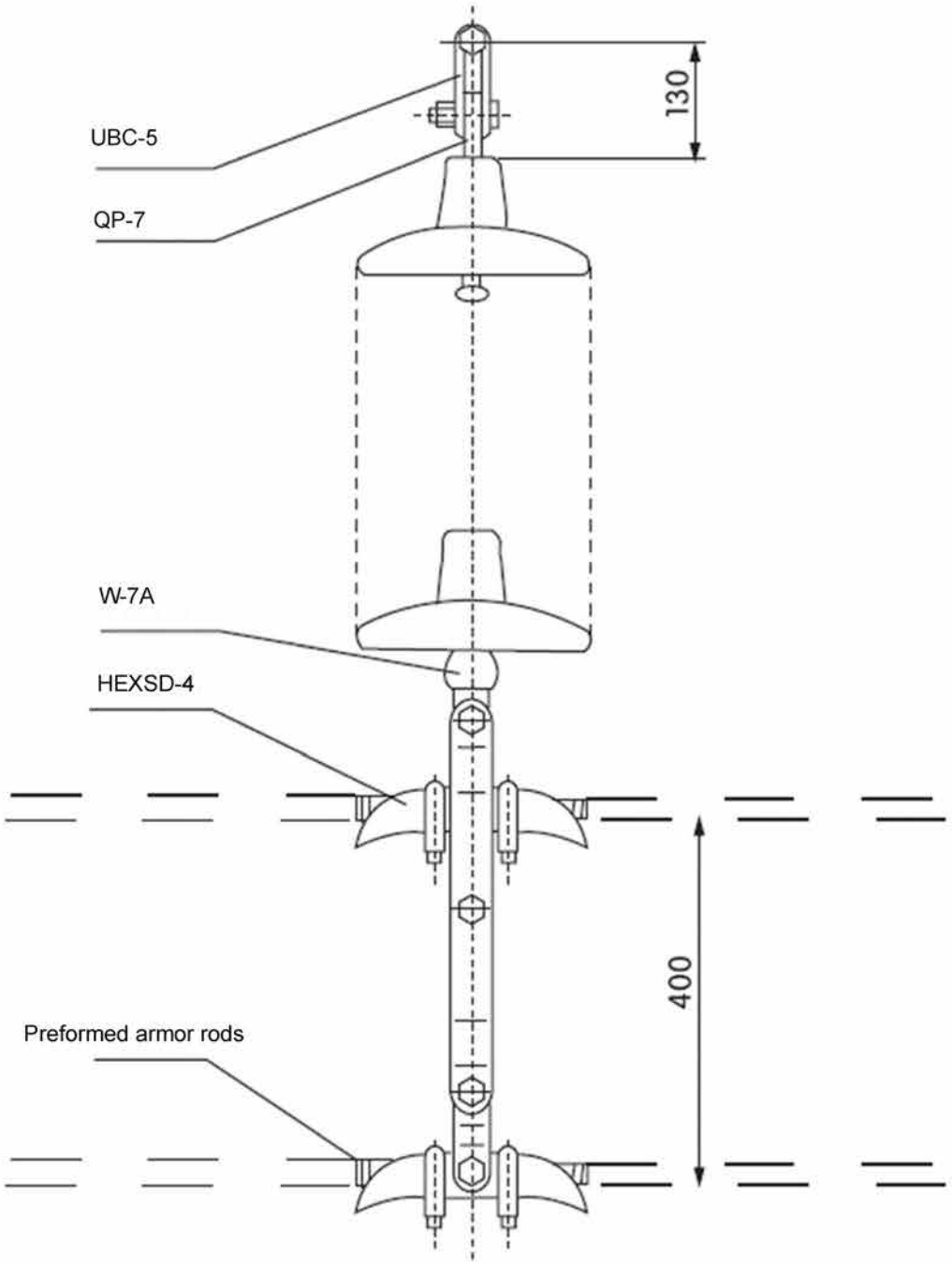
7, Appendix3: Double Tension Strings for Two-Bundle Conductor



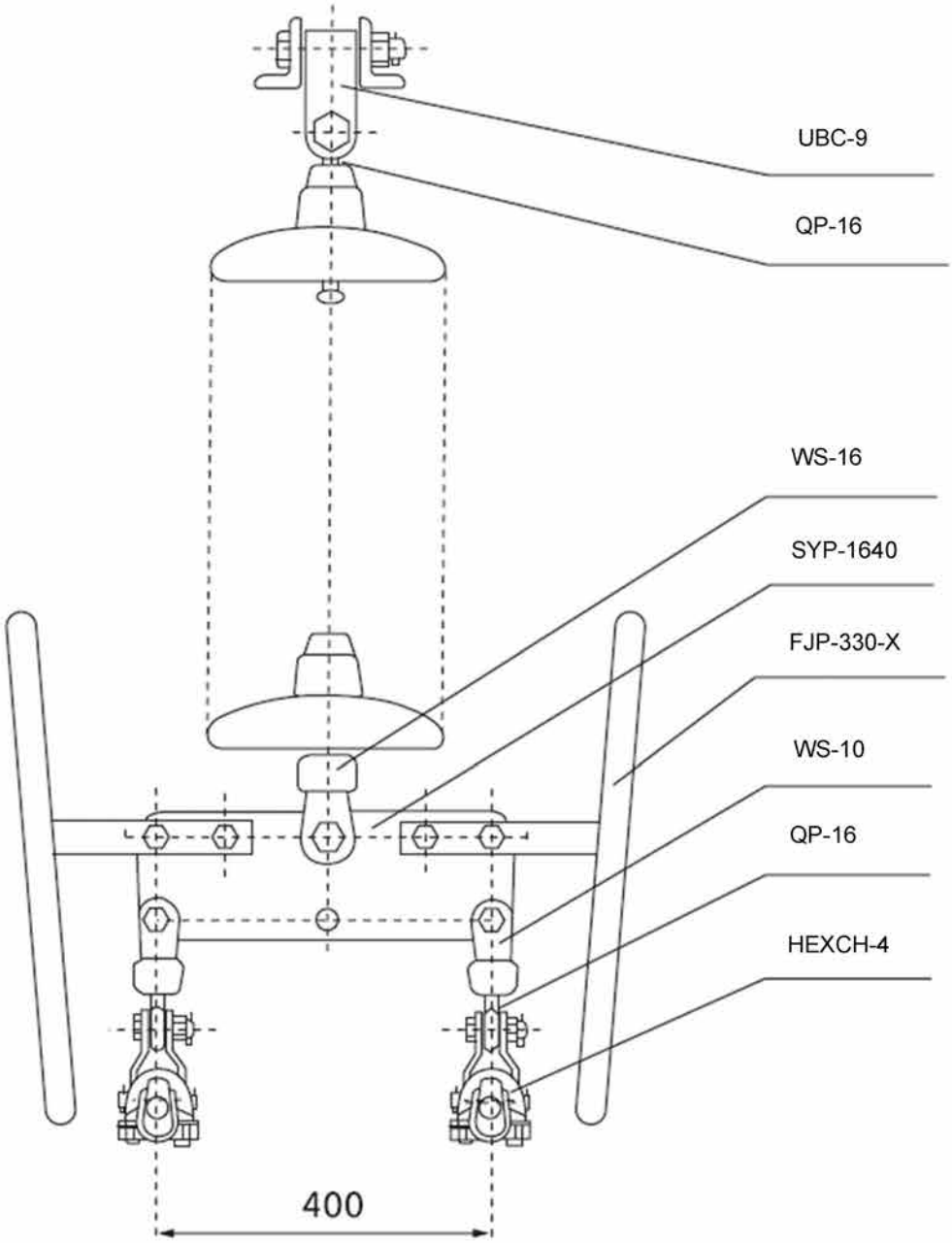
8, Appendix4: Single Suspension String for One Conductor



9, Appendix5-1: Single Suspension String for Two-Bundle Conductor



10, Appendix5-2: Single Suspension String for Two-Bundle Conductor



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