

# LV.ABC FITTINGS

*Catalogue 2011*



Name: CECEC Nanjing Electric Co., Ltd.  
Add: D-Wing, 12/F Riyue Mansion No.2 Tai Ping Nan Lu,  
Nanjing 210002, P.R. China  
Tel: +86-25-8467 9735, 8467 9327  
Fax: +86-25-8467 9736  
Email: \_\_\_\_\_@transmission-line.cn  
Website: www.transmission-line.cn

**BRAND :**



**ELECTRICAL  
HARDWARE**

**CECEC NANJING ELECTRIC CO., LTD.**

Machine Shop >>



Drop Forging Shop



Plastic Injection Machine >>



600 kN Tensile Testing Machine



20 kV Voltage Withstand Tester >>



Brielle Hardness Tester >>



CECEC Nanjing Electric Co., Ltd. is a leading professional supplier of electrical hardware for overhead electricity transmission, distribution & substation from the voltage of 0.38~760kV.

CECEC Nanjing Electric Co., Ltd. supplies the products to both utilities and electric power companies throughout Asia, Asia Pacific Region, Africa, Europe and North & South America as well. It is also supplies on OEM basis for numerous European, Australian and American companies who involved in T&D sector.

CECEC Nanjing Electric is now well known for its range of aluminum compression fittings, steel pin for pin type insulator, suspension clamp, strain clamp and forgings. it also has involved deeply in developing insulator fittings, vibration damper and fittings for Aerial Bundled Cable (ABC), etc.

High Quality, wide range of products and high working efficiency has won a lot of clients home and abroad.

Customers's Satisfaction and good services are the top goals that CECEC Nanjing Electric Co., Ltd. always pursues.





### Technical Data of LV. ABC (Aerial Bundle Cable) Fittings by SEHCO



Properties	Insulated Neutral Messenger	Four Cores System	Bare Neutral Messenger
	Insulated aluminum phase conductors, insulated aluminum alloy messenger which is also the neutral conductor. The cable can also have separate conductors for street lighting	Four equal aluminum alloy conductors including phase and neutral conductors. The cable can also have separate conductors for street lighting	Insulated aluminum phase conductors. Bare aluminum alloy messenger, which is also the neutral conductor. The cable can also have separate conductors for street lighting
Minimum breaking loads for the conductors	$3 \times 35 \text{ mm}^2 + 54.6 \text{ mm}^2 = 16.0 \text{ kN}$ $3 \times 70 \text{ mm}^2 + 54.6 \text{ mm}^2 = 16.0 \text{ kN}$ $3 \times 120 \text{ mm}^2 + 70.0 \text{ mm}^2 = 17.7 \text{ kN}$	$4 \times 25 \text{ mm}^2 = 16.7 \text{ kN}$ $4 \times 35 \text{ mm}^2 = 22.4 \text{ kN}$ $4 \times 50 \text{ mm}^2 = 33.2 \text{ kN}$ $4 \times 70 \text{ mm}^2 = 45.3 \text{ kN}$ $4 \times 95 \text{ mm}^2 = 60.8 \text{ kN}$ $4 \times 120 \text{ mm}^2 = 75.1 \text{ kN}$	$3 \times 35 \text{ mm}^2 + 50 \text{ mm}^2 = 14.7 \text{ kN}$ $3 \times 70 \text{ mm}^2 + 95 \text{ mm}^2 = 27.9 \text{ kN}$ $3 \times 120 \text{ mm}^2 + 95 \text{ mm}^2 = 27.9 \text{ kN}$
Withstanding of mechanical loads	Messenger carries all mechanical load	Mechanical loads applied on all conductors	Messenger carries all mechanical load
Tensile Strength	Neutral 300 N/mm <sup>2</sup> Phases 120 N/mm <sup>2</sup>	All conductors 160 N/mm <sup>2</sup>	Neutral 300 N/mm <sup>2</sup> Phases 120 N/mm <sup>2</sup>
Risk of neutral breaking under unexpected loads like falling trees etc.	The neutral conductor may break alone, if not provided weak links. Risk to personnel and apparatus due to risen phase voltage and high potential in neutral, if the earthing is not made properly.	The neutral conductor is unlikely to break alone, if the installation is made properly. So this system is of high mechanical strength.	The neutral is reinforced, but it may break alone. Risk to personnel and apparatus due to risen phase voltage and high potential in neutral, if the earthing is not made properly.
Live line work	No special requirements	No special requirements	No special requirements. Uninsulated neutral may have touch voltage in poor earthing conditions. Proper earthing is essential.
Connectors	Sometimes different connectors for phase and neutral	Same connector can be used for all cores	Sometimes different connectors for phase and neutral
Risk of corrosion in the neutral	Reduced risk	Reduced risk	Potential risk in extreme climate conditions
Installation methods	No special tools or methods, but pulleys required.	No special tools or methods, but pulleys required.	No special tools or methods, but pulleys required.

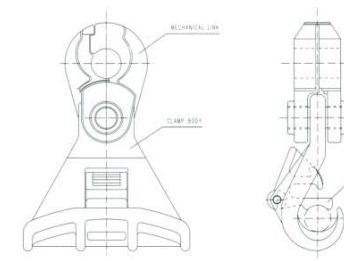


### Suspension Clamp for Insulated Neutral Messenger

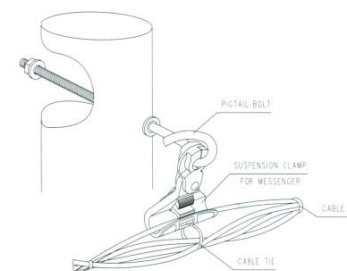


- Supporting on straight line and on angle up to 30° towards the pole and up to 50° pulling away from the pole. For larger line angles, 2 clamps shall be used.
- Tool free installation & No loosable parts
- Clamp and mechanical link are made of high mechanical, weather & UV resistant fiberglass reinforced plastic which gives an important additional insulation between the pole and cable.
- The clamps can be used together with mounting bracket or pigtail bolt.

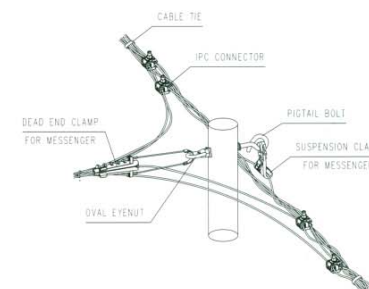
The clamps are designed to hang LV. ABC with insulated neutral messenger. The neutral messenger is fixed by pressure pad with locking device. Mechanical link allows a transversal and longitudinal movement of the suspension clamp body.



Cat. No.	Neutral Messenger Cross Section (mm <sup>2</sup> )	Neutral Messenger Diameter (mm)	UTS (kN)	Hole Dia Max. (mm)	Mass (kg)
SCM-1650	16 - 50	8 - 11	5	25	0.15
SCM-5070	50 - 70	10 - 13.5	12	25	0.20
SCM-95120	95 - 120	15 - 120	30	25	0.26



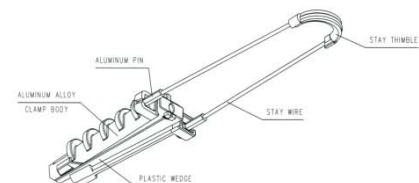
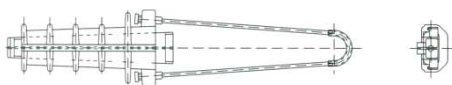
Standard Suspension Assembly Set



T-off Assembly Set

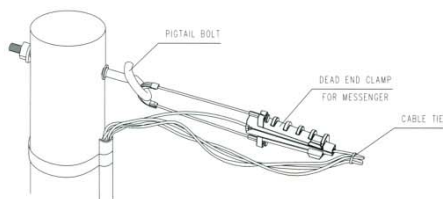
**Dead End Clamp for Insulated Neutral Messenger**

The clamps are designed to anchor LV. ABC with insulated neutral messenger. The clamp consists of an aluminum alloy casted body and self adjustable plastic wedges which fixing the neutral messenger without damaging the insulation layer of LV. ABC.

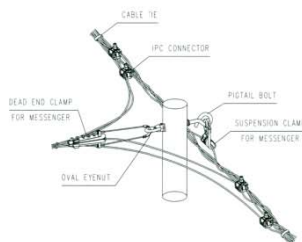


- Flexible tail of the clamp with insulated wear-resistant stay thimble allows installation of up to 3 clamps on a bracket or pigtail bolt.
- Tool free installation & No loosable parts
- Clamp body is made of corrosion resistant aluminum alloy. Tail is made of stainless steel and weather & UV resistant fiberglass reinforced plastic. Wedges are made of weather & UV resistant fiberglass reinforced plastic.
- The clamps can be used together with mounting bracket or pigtail bolt.
- Line angles are 50° for single anchoring and 100° for double.

Cat. No.	Neutral Messenger Cross Section (mm <sup>2</sup> )	Neutral Messenger Diameter (mm)	UTS (kN)	Recommended Working Load (kN)	Mass (kg)
DECM-1625	16 - 50	6 - 8	6	2.5	0.25
DECM-2535	25 - 35	8 - 11	10	3.0	0.32
DECM-5070	50 - 70	12 - 14	15	5.0	0.35
DECM-7095	70 - 95	14 - 16	20	7.0	0.42



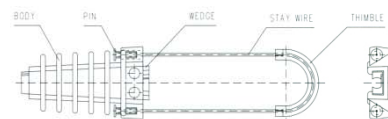
Standard Dead End Assembly Set



T-off Assembly Set

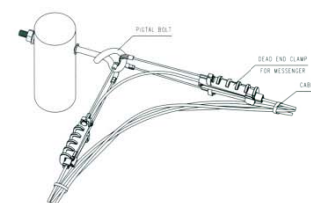
**Dead End Clamp for Insulated Neutral Messenger**

The clamps are designed to anchor LV. ABC with insulated neutral messenger. The clamp consists of high mechanical strength weather resistant thermo plastic body and self adjustable plastic wedges which fixing the neutral messenger without damaging the insulation layer of LV. ABC.



- Flexible tail of the clamp with insulated wear-resistant stay thimble allows installation of up to 3 clamps on a bracket or pigtail bolt.
- Tool free installation & no loosable parts
- Clamp body and wedges are made of weather & UV resistant fiberglass reinforced plastic. Tail is made of stainless steel and weather & UV resistant fiberglass reinforced plastic.
- The clamps can be used together with mounting bracket or pigtail bolt.
- Line angles are 50° for single anchoring and 100° for double.

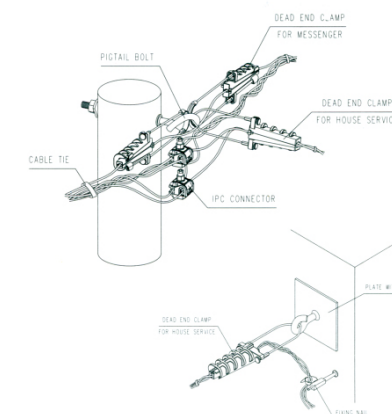
Cat. No.	Neutral Messenger Cross Section (mm <sup>2</sup> )	Neutral Messenger Diameter (mm)	UTS (kN)	Recommended Working Load (kN)	Mass (kg)
PA68	16 - 25	6 - 8	6	2.5	0.15
PA811	25 - 35	8 - 11	10	3.0	0.20
PA1214	50 - 70	12 - 14	15	5.0	0.21
PA1416	70 - 95	14 - 16	20	7.0	0.25



Large Angle Dead End Assembly Set



House Service Dead End Clamp



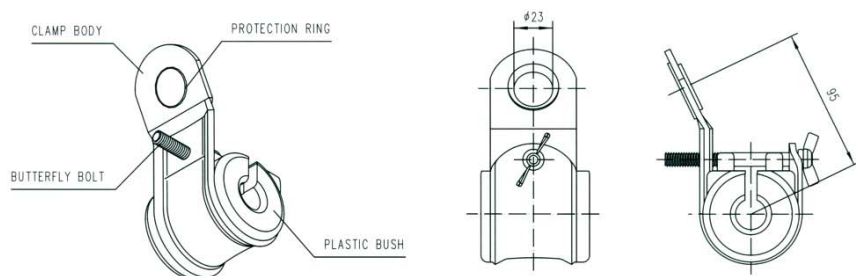
House Service T-off Assembly Set



*Suspension Clamp for Self Supporting LV. ABC*

The clamps are designed to hang self supporting LV. ABC and no damaging to cables. These clamps can also be used to hang LV. ABC with bare and insulated neutral messenger.

- Supporting straight line and on angles up to 30°
- Tool free installation due to equipped with butterfly end nut.
- No loosable parts
- Clamp bushing is made of weather & UV resistant elastomer.
- All ferrous parts are hot dip galvanized.

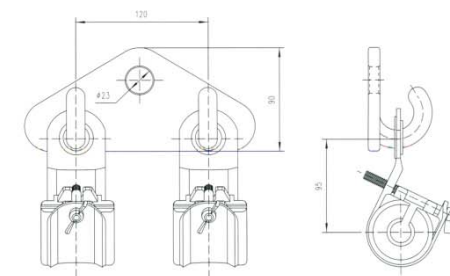


Cat. No.	Cross Section (mm <sup>2</sup> )	Bundle Dia. (mm)	UTS (kN)	Mass (kg)
SC4-25	2 × 50, 4 × 25, 4 × 35	21 - 25	15	0.53
SC4-50	2 × 95, 4 × 50	26 - 30	15	0.42
SC4-70	4 × 70	31 - 35	15	0.38
SC4-95	4 × 95	36 - 40	15	0.36
SC4-120	4 × 120	40 - 43	15	0.32

*Suspension Clamp for Self Supporting LV. ABC*

The clamps are equipped with hot dip galvanized steel plate to support lines with angles up to 60°, suitable for self supporting LV. ABC and that with bare or insulated neutral messenger as well.

- Easy for installation with hooks on steel plate and butterfly end bolt on the individual clamp.
- Two standard suspension clamps must be installed on steel plate.
- Clamp bushing is made of weather & UV resistant elastomer
- All ferrous parts are hot dip galvanized.



Cat. No.	Cross Section (mm <sup>2</sup> )	Bundle Dia. (mm)	UTS (kN)	Mass (kg)
SC4-25L	2 × 50, 4 × 25, 4 × 35	21 - 25	15	2.20
SC4-50L	2 × 95, 4 × 50	26 - 30	15	2.00
SC4-70L	4 × 70	31 - 35	15	1.90
SC4-95L	4 × 95	36 - 40	15	1.86
SC4-120L	4 × 120	40 - 43	15	1.78

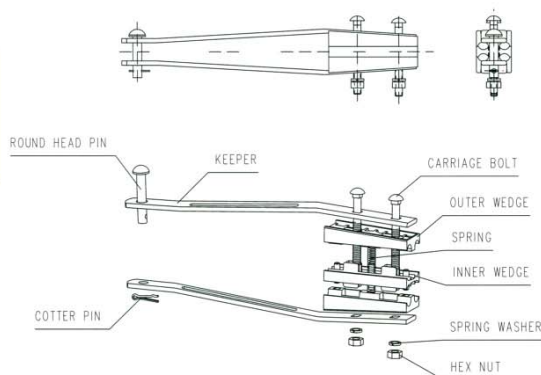


### Dead End Clamp for Self Supporting LV. ABC

The clamps are design to anchor self supporting LV. ABC from 2 to 4 cores. The wedge can be self-adjusting. Pilot wires or street lighting conductors are led alongside the clamp.

The self opening is featured by an integrated spring facilities for easily insert the conductors into the clamp.

- The wedges are made of weather & UV resistant fiberglass reinforced plastic ensuring a good stress repartition on bundle without damaging insulation.
- All ferrous parts are hot dip galvanized.
- Easy for installation



Cat. No.	Cross Section (mm <sup>2</sup> )	Max. Continuous Operating Load (N/mm <sup>2</sup> )	UTS (kN)	Mass (kg)
DEC4-2550	4 x 25 - 4 x 50	40	30	0.6
DEC4-7095	4 x 70 - 4 x 95	40	43	1.0



Adopted the state-of-art technology to meet the requirements of most popular international standards including DIN VDE 0220, NFC 33020, SFS 2663, SFS 4644, EATS 43-14.

The insulated piercing connectors are designed and tested to fit to all types of LV. ABC cables as well the connections to service and lighting cable cores, whether the cables are insulated by XLPE, PE or PVC. The bolts are tightened until the heads sheared off. Stripping of insulation of LV. ABC is avoided. Voltage withstand in water is 6 kV.



- With special designed contact plates which can be used for the connection of aluminum to aluminum, aluminum to copper or copper to copper



- Well designed shear-off nuts & bolts to make the piercing force constant while keep good conductivity with no damage to cables

### Reference Tests

- Big current load to check if the temperature rising of connector is less than that of conductor
- Voltage withstand test to check the voltage withstand in air or in water.
- DC resistance test to check the resistance ratio.
- Climate aging test to check the performance of the connector in heavy UV radiation, salt fog in chamber of 70°C.
- Electric aging test to check the performance of the connector after 200 cycles of heating by current to 120°C and then cooling in ambient temperature.
- Short circuit test to check if the connector can pass three (3) times of short circuit with satisfactory DC resistance ratio, degree of scatter of DC resistance.
- Slipping strength test to check the holding strength of the connector

### Insulated Piercing Connector



- Designed for installation from -20° C up to +50° C.
- Operation with temperatures ranging from -50° C up to +150° C.
- No limitation of mechanical loads for main and tap cables.
- Shear-off head forces are adapted to the required contact forces for each application.
- Voltage withstand to 6 kV and no moisture ingress after immersed in a 30 cm water tank for 30 minutes.
- No significant change in contact resistance and temperature after overloads and load cycling.
- Voltage withstand to 6 kV after heavy weathering exposure like UV radiation, humidity and temperature cycling
- Corrosion resistance of metal parts has proven satisfactory in salt fog chamber and wet SO<sub>2</sub> gas chamber as well.



- Sealing covers & cable end caps together with proper grease to make sure of good performance of water tightness and moisture resistance



- High quality washers, curved or plain, round or profiled



*Insulated Piercing Connector***CAD Designed**

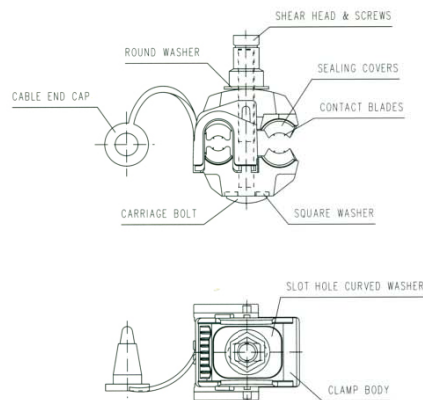
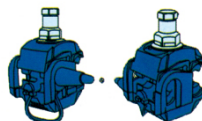
All components of our insulated piercing connectors are designed by professional CAD software such as UG, Pro/E, CAXA and the manufacture is furnished down accordingly to make sure the performances of our piercing connector as what we designed.

**Material:**

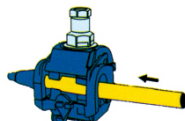
- Clamp body: weather & UV resistant fiberglass reinforced plastic
- Contact plate (teeth): copper alloy or aluminum alloy
- Cable end cap: PVC
- Sealing cover: thermoplastic elastomer (TPE) or PVC
- Bolt and washer: stainless steel or steel, hot dip galvanized
- Grease: organic silicone compound

Suitable for ABC cables:

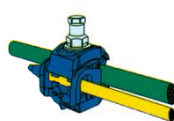
Self-supporting LV. ABC or LV. ABC with insulated neutral messenger

**Easy for Installation**

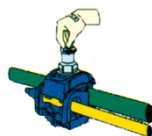
1. Select a proper direction of the connector so that the tap cable can be put into the cable end cap



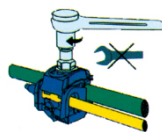
2. Put the tap cable into the connector and then into the cable end cap



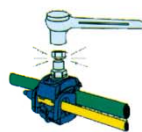
3. Adjust the position of the connector to connect the main cable properly



4. Tighten the shear-off nut by hand and fix the connector at a proper position



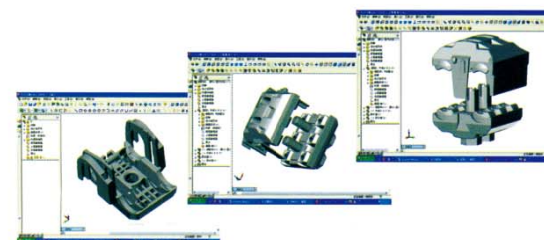
3. Tighten the shear-off nut with a sleeve type wrench or a torque wrench. Do not use the clevis type spanner



4. Tighten the shear-off nut continuously until the top nut is broken and dropped down. The installation then finished

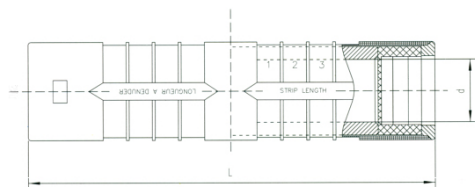
*Insulated Piercing Connector*

Cat. No.	Application Range		Bolt	Torque (Nm)	Mass (Kg)
	(mm <sup>2</sup> )	(mm <sup>2</sup> )			
	Main	Tap			
IPCS-51013	16 - 95	1.5 - 6	1XM6	7	0.052
IPCS-51014	16 - 95	1.5 - 10	1XM6	7	0.054
IPCS-8B38	50 - 150	6 - 50	1XM8	11	0.126
IPCS-51028	16 - 95	4 - 50	1XM8	11	0.135
IPCS-51037	16 - 95	6 - 35	1XM8	11	0.163
IPCS-510510	16 - 95	16 - 95	1XM8	11	0.163
IPCS-9C38	70 - 185	6 - 50	1XM8	11	0.160
IPCS-610610	25 - 95	25 - 95	1XM8	18	0.160
IPCS-7B7B	35 - 150	35 - 150	1XM8	18	0.183
IPCS-8B8B	50 - 150	50 - 150	1XM8	18	0.183
IPCS-AD6A	120 - 240	25 - 120	1XM8	20	0.195
IPCD-10A8A	95 - 120	50 - 120	2XM8	20	0.355
IPCD-10D10D	95 - 240	95 - 240	2XM10	37	0.930





### Waterproof Insulated Compression Sleeve



These insulated compression sleeves are suitable for insulated stranded aluminum conductors. Stripped cables are inserted up to the block in the sleeve. Crimping according to the marks on the sleeve. The electrical contact and the sealing by the elastomer ring is achieved during the crimp process.

Mechanical strength is 60% of cable's UTS. Tested for watertightness is 6 kV for 30 minutes in a waterbath. Joint compound shall be filled into the sleeves to assure of good conductivity. Sealed with caps to avoid water and humidity enter into the sleeves.

Standard packing: 100 pcs per plastic bag.

Cat. No.	Cross Section (mm <sup>2</sup> )	Diameter d (mm)	L (mm)	Mass (kg)
ICS-16	16 - 16	5.3	70	0.025
ICS-25	25 - 25	6.5	70	0.025
ICS-35	35 - 35	8.0	70	0.025
ICS-50	50 - 50	9.3	102	0.048
ICS-70	70 - 70	10.7	102	0.048
ICS-95	95 - 95	12.5	136	0.096

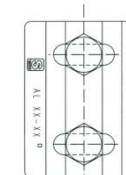
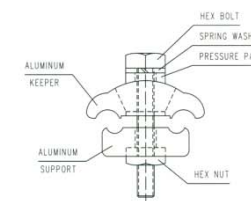
### Fixing Nail, FNS-70-150

The fixing nails are designed to install LV. ABC with bundle diameter of 25-60 mm alongside walls and poles by a cable tie on the fixing nail. The body and cable tie are made of weather & UV resistant fiberglass reinforced plastic suitable for climate temperature from -50° C to +80° C.

The expansion plug part is inserted in a drilled hole of  $\phi 12$  mm and by hitting a nail inside fixed to the wall. For applications on walls or poles with soft material like wood, the expansion plug is simply cut off and the nail can be hammered into the wood directly. 0.08 kg/set.



### Tapping Clamp for Bare Neutral Messenger



These tapping clamps are designed to anchor LV. ABC with bare neutral messenger with curved grooves

- Cross grooved clamp channels improve mechanical pullout strength and contact
- Clamp bodies are made of corrosion resistant, high strength aluminum alloy.
- Bolts and nuts are class 8.8 and hot dip galvanized

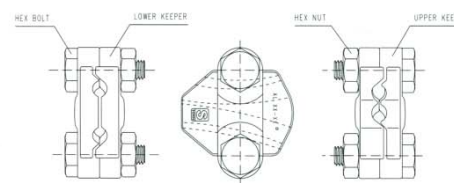
Cat. No.	Cross Section (mm <sup>2</sup> )	Conductor Diameter (mm)	Mass (kg)
----------	----------------------------------	-------------------------	-----------

#### Tapping Clamp with Curved Grooves

TCC-1	25/35	6.3/8.1	0.11
TCC-2	50/70	9.0/11.7	0.21

These tapping clamps are designed as universal clamps including dead end applications for bare conductors.

- Allows insert of conductors without dismantling conductor
- No loosable parts, nuts fixed to clamp body.
- Cross grooved clamp channels improve mechanical pullout strength and contact
- Clamp bodies are made of corrosion resistant, high strength aluminum alloy.
- Bolts and nuts are class 8.8 and hot dip galvanized

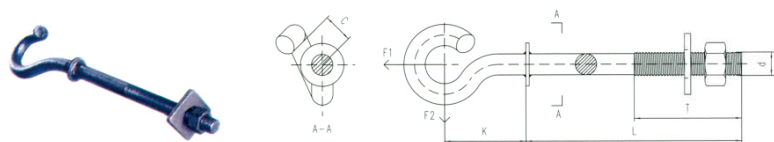


Cat. No.	Cross Section (mm <sup>2</sup> )	Conductor Diameter (mm)
----------	----------------------------------	-------------------------

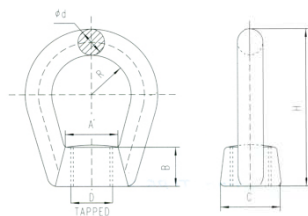
#### Tapping Clamp with Parallel Grooves

TCP-1	6 - 35/6 - 35	2.7 - 8.1
TCP-1	16 - 70/16 - 70	5.1 - 11.7
TCP-3	16 - 120/16 - 120	5.1 - 14.0



**Pigtail Bolt with Shoulder, Galvanized**

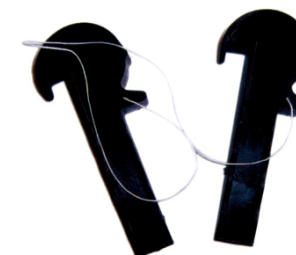
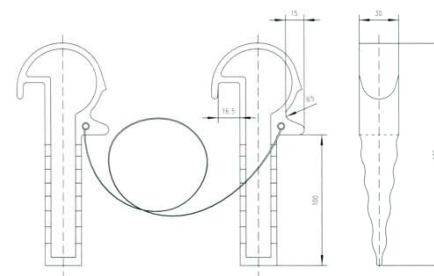
Cat. No.	D (mm)	L (mm)	T (mm)	K (mm)	C (mm)	SML F <sub>1</sub> (KN)	SML F <sub>2</sub> (KN)	Mass (kg)
PBS-16210	M16	210	120	80	20	11.9	2.4	0.80
PBS-16240	M16	240	120	80	20	11.9	2.4	0.85
PBS-16320	M16	320	120	80	20	11.9	2.4	0.96
PBS-20210	M20	210	120	80	20	14.5	4.6	1.22
PBS-20240	M20	240	120	80	20	14.5	4.6	1.32
PBS-20320	M20	320	120	80	20	14.5	4.6	1.50

**Forged Oval Eyenut, Galvanized**

Cat. No.	D (mm)	D (mm)	H (mm)	R (mm)	A (mm)	B (mm)	C (mm)	Mass (kg)
OEN-16	M16	12.7	76	25	19	19	32	0.25
OEN-20	M20	12.7	76	25	19	19	32	0.24

**Core Separator, CS-51**

When install connectors or suspension clamp, the phase conductors can be separated by a pair of core separator CS-51 which is made of weather & UV resistant thermoplastic. One pair per unit. 0.17 kg/unit.

**Torque Wrench, TG-25**

Torque range:5-25 Nm with precision of  $\pm 4\%$  according to ISO 6789-1992 at scale unit of 0.5 Nm. When setting torque moment, pull out the hex key at the end the wrench, bend the rear portion to 90°, twist the hex key to the needed torque value, then put the hex back to the original position. The torque moment is read out in "Nm" but can be converted into "lbs-ft" from the label on the wrench easily. 0.60kg/set.

**Torque Wrench for Testing, TLB6-30**

Torque range:6-30 Nm with precision of  $\pm 3\%$  according to ISO 6789-1992 at scale unit of 0.3 Nm. It can be used for testing torque moment and also apply torque when installation as well. Two directions are workable. Indicator is scaled in unit of "Nm" 0.80kg/set.

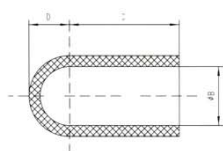
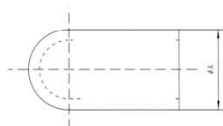




### PVC Dead End Tubes

Made of PVC, black in grade of V50. Grease shall be filled into the dead end tubes to avoid water and humidity enter into the tubes.

Standard packing: 100 pcs for each plastic bag and then in carton.

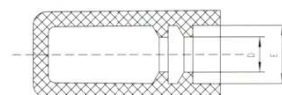
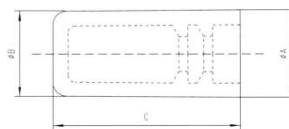


Cat. No.	Suitable For	A(ø) (mm)	B(ø) (mm)	C (mm)	D (mm)
DET-16	ABC Cable of 16 mm <sup>2</sup>	14	8	30	7
DET-25	ABC Cable of 25 mm <sup>2</sup>	16	10	30	8
DET-50	ABC Cable of 50 mm <sup>2</sup>	18	12	30	9
DET-70	ABC Cable of 70 mm <sup>2</sup>	20	14	30	10
DET-95	ABC Cable of 95 mm <sup>2</sup>	24	16	30	11

### PVC Cable End Caps

Made of PVC, black in grade of V50. Grease shall be filed into the dead end tubes to avoid water and humidity enter into the tubes.

Standard packing: 100 pcs for each plastic bag and then in carton.

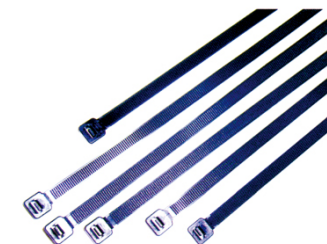
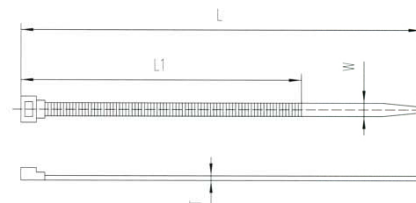


Cat. No.	Suitable For	A(ø) (mm)	B(ø) (mm)	C (mm)	D(ø) (mm)	E(ø) (mm)
CEC-1025	ABC Cable of 10~25 mm <sup>2</sup>	13.0	12.6	23.5	5.2	8.8
CEC-3550	ABC Cable of 35~50 mm <sup>2</sup>	16.0	15.5	26.0	6.2	11.3
CEC-7095	ABC Cable of 70~95 mm <sup>2</sup>	20.5	19.8	31.0	9.2	15.5

### Self Locking Cable Ties

Made of weather & UV resistant fiberglass reinforced thermoplastic with tensile strength of not less than 40N/mm<sup>2</sup>, can be used in ambient temperature form -40°C to +85°C. Color can be black or white. Flammability grade: UL 94V.2

Standard packing: 100 pcs for each plastic bag.



Cat. No.	L (mm)	L1 (mm)	W (mm)	T (mm)	For Bundled Dia. (mm)
SLCT-7.2 × 250	250	220	7.2	1.5	3 - 63
SLCT-7.2 × 300	300	270	7.2	1.5	4 - 82
SLCT-9.0 × 400	400	370	9.0	1.8	10 - 120
SLCT-10.0 × 400	400	370	10.0	1.8	10 - 120
SLCT-12.0 × 500	500	470	12.0	2.0	14 - 160



Stainless steel tapes & buckles

### Filer Paste, CF260

Henkel® CF260 Filler Paste is the recommended filling compound for compression fittings used in tension applications. As the fittings is compressed CF260 is forced between the strands effectively sealing out air and moisture. CF260 is packaged in easy-to-use plastic squeeze bottles. Directions for its use are included on the label of every bottles.

Standard Package: 322g plastic bottle and 35 pcs for each case.



### Caulking Gun for Paste Pressing, MK-6

MK-6 Caulking Gun is for pressing filer paste or silicone sealant glue. 9" length of semi-cylindrical gun frame body. Round pulling bar with big hook. Black painted handle is made of aluminum alloy. Gun frame body is made of steel with chromium plated. Frame body can revolve by 360 degrees. Driving head is made by 6mm thickness steel plate to reach 500 pounds pressing force.







### Oxide Inhibiting Compound

Burdny® PENETROX® A is a natural (petroleum) base compound with evenly suspended zinc particles. It is recommended for aluminum to aluminum, aluminum to copper connections and aluminum conduit threads. It is not recommended for use with rubber or polyethylene insulated conductors. UL listed to 600V.

Standard Package: 4 fl.oz per bottle. 12 bottles per carton.



### Cylinder of Hydraulic Compressor -100 Tons

Cylinder of Hydraulic Compressor is the main part of compressor for the compression when installation. Following is its main technical data.

Cat. No.	Range of Extrusion (mm)	Rated Load (kN)	Space of Move (mm)	Mass (kg)
SR-100C2	12.75 ~ 32.3	1000	22	34

### Aluminum Alloy Stringing Pulley

Cat. No.	Rated Load (kN)	Suitable Conductor (mm <sup>2</sup> )	Overall Diameter (mm)	Mass (kg)
SDH-1	10	≤ 95	260	6.5
SDH-2	20	≤ 185	280	9.8
SDH-3	30	≤ 300	400	14.8



### Conductor Cleaning Brushes

As brushes wear, they can be rotated, by loosening the anchor screws, so that unused bristles will come in contact with conductor. Various sizes of conductor brushes are available.



### Dimensions of LV. ABC according to HD 626

#### 1. LV. ABC with Insulated Neutral Messenger

According to HD 626 S1. 1996 Part 6-Section E  
Aluminium conductors with XLPE insulation,  
included in standard: NF C 33029



#### Dimensions of Phase Conductors

Cross section (mm <sup>2</sup> )	Conductor diameter		Thickness of insulation		Core diameter		Current carrying capacity (A)*	Breaking load (kN)
	min. (mm)	max. (mm)	nom. (mm)	min. (mm)	min. (mm)	max. (mm)		
16	4.6	5.1	1.2		7.0	7.8		
25	5.8	6.3	1.4		8.6	9.4	112	
35	6.8	7.3	1.6		10.0	10.9	138	
50	7.9	8.4	1.6		11.1	12.0	168	
70	9.7	10.2	1.8		13.3	14.2	213	
95	11.0	12.0	1.8		14.6	15.7	258	
120	12.0	13.1	1.8		15.6	16.7	306	
150	13.9	15.0	1.7		17.3	18.6	344	

\* defined for ambient temperature of 30° C and max. conductor temperature of 90° C

#### Dimensions of Neutral Messenger Conductors

Cross section (mm <sup>2</sup> )	Conductor diameter		Thickness of insulation		Core diameter		Current carrying capacity (A)	Breaking load (kN)
	min. (mm)	max. (mm)	nom. (mm)	min. (mm)	min. (mm)	max. (mm)		
54.6	9.2	9.6	1.6		12.3	13.0		16.6
70	10.0	10.2	1.5		12.9	13.6		20.5
95	12.2	12.9	1.6		15.3	16.3		27.5

#### Dimensions of Cable Bundle

Number of phase core × cross section  
+ public lighting conductors  
+ neutral cross section

Bundle diameter  
approx.

(mm <sup>2</sup> )	(mm)
3 × 25 + 54.6	30.0
3 × 35 + K × 16 + 54.6	33.0
3 × 50 + K × 16 + 54.6	36.0
3 × 70 + K × 16 + 54.6	37.5
3 × 70 + K × 25 + 54.6	40.0
3 × 70 + K × 16 + 70	41.0
3 × 95 + K × 16 + 70	44.0
3 × 120 + K × 16 + 70	46.0
3 × 120 + K × 16 + 95	47.0
3 × 150 + K × 16 + 70	48.0
3 × 150 + K × 16 + 95	49.0

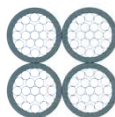
K: number of public lighting conductors (K can be equal to 0, 1, 2 or 3)



## 2. Self-Supporting LV. ABC

According to HD 626 S1. 1996 Part 4-Section F

Aluminium conductors with XLPE insulation,  
included in standards: NFA2 x (VDE 0276-  
626 4F-1), AsXS(n) (PL WT92/K396)  
1-AES (CSN 34761-4F)



### Dimensions of Conductors

Cross section (mm <sup>2</sup> )	Conductor diameter min. max. (mm) (mm)		Thickness of insulation nom. min. max. (mm) (mm) (mm)		Core diameter max. (mm)	Current carrying capacity (A)*	Breaking load (kN)
16	4.6	5.1	1.2	1.00	7.8		2.60
25	5.6	6.5	1.3	1.07	10.0	107	4.17
35	6.6	7.5	1.3	1.07	11.0	132	5.78
50	7.7	8.6	1.5	1.25	12.5	165	8.45
70	9.3	10.2	1.5	1.25	14.0	205	11.32
95	11.0	12.0	1.7	1.50	16.1	-	15.30
120	12.5	13.5	1.8	1.60	17.6	-	20.00
150	13.9	15.0	1.8	1.60	18.8		25.00

\* defined for ambient temperature of 35°C and max. conductor temperature of 80°C

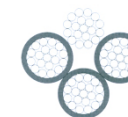
### Dimensions of Cable Bundle

Number of cores × cross section + public lighting conductors (mm <sup>2</sup> )	Bundle diameter approx. (mm)
2 × 16	15
2 × 25	18
2 × 35	20
4 × 16	18
4 × 25	22
4 × 35	25
4 × 50	28
4 × 70	32
4 × 70 + 1 × 35	36
4 × 70 + 2 × 35	40
4 × 95	37
4 × 120	40
4 × 120 + 2 × 35	43
4 × 150	44

## 3. LV. ABC with Bare Neutral Messenger

According to HD 626 S1. 1996 Part 5-Section D

Phase conductors with XLPE insulation,  
included in standard: AMKA (SFS 2200)



### Dimensions of Phase Conductors

Cross section (mm <sup>2</sup> )	Conductor diameter min. tolerance (mm) (mm)		Thickness of insulation nom. min. max. (mm) (mm) (mm)		Core diameter min. max. (mm) (mm)	Current carrying capacity (A)*	Breaking load (kN)
16	4.4	± 0.05	1.4		7.1 7.3	70	
25	5.9	± 0.20	1.4		8.3 9.1	95	
35	6.9	± 0.20	1.6		9.7 10.5	115	
50	8.1	± 0.25	1.6		10.8 11.8	140	
70	9.7	± 0.25	1.8		12.8 13.8	180	
120	12.8	± 0.30	2.0		16.2 17.4	250	

\* defined for ambient temperature of 25°C and max. conductor temperature of 70°C

### Dimensions of Neutral Messenger Conductors

Cross section (mm <sup>2</sup> )	Conductor diameter min. tolerance (mm) (mm)		Thickness of insulation nom. min. max. (mm) (mm) (mm)		Core diameter min. max. (mm) (mm)	Current carrying capacity (A)*	Breaking load (kN)
25	5.9	± 0.20	-		5.5 6.3		7.4
35	6.9	± 0.20	-		6.5 7.3		10.3
50	8.1	± 0.25	-		7.6 8.6		14.2
70	9.7	± 0.25	-		9.2 10.2		20.6
95	11.4	± 0.30	-		10.8 12.0		27.9

### Dimensions of Cable Bundle

Number of phase cores × cross section + neutral cross section (mm <sup>2</sup> )	Bundle diameter approx. (mm)
1 × 16 + 25	15
3 × 16 + 25	22
4 × 16 + 25	22
3 × 25 + 35	26
4 × 25 + 35	26
3 × 35 + 50	30
3 × 50 + 70	35
3 × 70 + 95	41
3 × 120 + 95	47