



## Transmission Line Products



# Company Profile



### **Vision**

To make quality products and become the trusted name for railways across the world



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## Empowering Railways for a Greener Tomorrow

Line Products (TLP) ransmission started in1977. The operations organization formed to cater to the burgeoning electrification needs of all the state electricity boards across the country. Taking into consideration the quality of products manufactured by TLP, in 1985, Indian Railways approached TLP to manufacture OHE fittings required for railway electrification. Since then, TLP has been developing and manufacturing items for both transmission lines and railway electrification. Over time, TLP had become one of the leading design and manufacturing company for transmission line products for the power sector and railway electrification items for Indian Railways and had also become one of the most trusted companies in the railway sector for its ability to adapt to new changes.

In 2013, TLP started its foray in the metro sector through Jaipur Metro. From then onwards TLP has been supplying to different metros across the country.

In 2017, TLP was approached by Dedicated Freight Corridor (DFC) to design special items for them. TLP at present is one of the largest supplier of those products to the DFC.

From 2019 onwards, TLP started to focus on just railway electrification. Since then, it has not only continued to manufacture for railways, but it has also become one of the primary suppliers for metros across India and DFC as well. Due to its technical brilliance, TLP has earned accoladesforcustomizing many items for customer needs.

Riding on our proven capabilities, TLP is now moving towards manufacturing other railway items apart from only OHE.





### **QUALITY**

From its inception, TLP has stood out from the competitors due to its reputation for quality. Not only do we follow clients' requirements religiously, we also question and add to it based on our experience. Our focus on automation, our strict quality control procedures and trained employees form the basis of our well earned reputation.

# Company Values



### **ADAPTABILITY**

Adaptability is part of our DNA. We know that change is inevitable. Our decisions are made based on our vast experience, trained staff, equipment that meet the need and direction of the market. This is why we are known in the country for our ability to make new products for our clients.



### **CLIENT SATISFACTION**

Client satisfaction is why we have some of the oldest customers in the industry. Our quick turnaround, focus on quality and adaptability allow us to service our clients to their utmost satisfaction.

### **TLP Customers**

This is an illustrative list





















### **TLP User Segments**























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### **Our Newly Approved Items**

## Our Products

















### **Newly Approved Items**

## 1263

### **Strain Clamp Link**

Weight Ilts weight is about 0.7 kg

Usage This is used in termination fittings





### **Normal Bent Steady Arm Hook**

Weight Its weight is about 0.4 kg
Usage It is used in steady arm

### 5094-1



### **Counter Weight Eye Rod (0.65 m)**

Weight Its weight is about 2.037 kg

Usage Style 1 to be used in circular

counter weight assembly and Style 2 to be used in trapezoidal counter

weight assembly

### 3011-2



### **Double Clevis Assembly**

Weight Its weight is about 0.975 kg

Usage Double Clevis Assembly is used

in termination fittings of feeder, return conductor and return feeder

### **Newly Approved Items**

### TI/DRG/OHE/FTGFE/RDSO/00017/22/0



### Tee Connector Suitable for 20 mm GS wire to 20 mm GS wire

Weight Its weight is about 1.5 kg

Usage This connector is used in earthing

arrangement

### TI/DRG/OHE/FTGFE/RDSO/0021/22/0



### Straight Connector Suitable for 20 mm GS wire to 20 mm GS wire

Weight Its weight is about 1.5 kg

Usage This connector is used in earthing

arrangement

### 5005-1



### Guy Rod (10.9 m long)

Weight Its weight is about 44 kg

Usage These are rods of diameter 25 mm

and are used in mast fittings. Their height and weight differ based on

where it is to be used.

### 5005-2



### Guy Rod (12.3 m long)

Weight Its weight is about 47 kg

Usage These are rods of diameter 25 mm

and are used in mast fittings. Their height and weight differ based on

where it is to be used.



### **Our Customized AC Products**

## Our Products





































### 88.9 OD Connectors

### T889-1



Rigid Bi-metallic Terminal Connector suitable for 88.90 mm Dia. Al. Tubular busbar to Terminal pad of 25KV Isolator/CT

Weight Its weight is about 2.7kg
Usage This item is used to connect

Aluminium busbar to Terminal Pad

### T889-2



Expansion Type Terminal Connector to suit 88.90 mm dia Al. Tubular busbar to CT / Isolator / Terminal Pad

Weight Its weight is about 2.14 kg
Usage This item is used to connect

Tubular busbar to Current
Transformer or Isolator or Terminal

pad

### T889-3



25kv system rigid Bus Splice connector to suit 88.90 mm O/D Al. tube on both ways

Weight Its weight is about 3.84 kg
Usage This item is used to connect Al.
Tube from both sides

T889-4



25KV system TEE connector to suit 88.90 mm 0/D Al. Tubular busbar

Weight Its weight is about 3.0 kg

Usage It is used to connect Tubular bus-

bar with another Tubular busbar

### 88.9 OD Connectors

### T889-5



### 25kv system Tee connector to suit 88.90 mm o/d Al. Tubular busbar to AAC **Spider conductor**

Weight Its weight is about 2.60 kg Usage It is used to connect Tubular busbar to AAC Spider conductor

### T889-6



### Sliding clamp for 88.90 mm o/d Al. **Tubular busbar**

Its weight is about 1.80 kg Weight It is used on Tubular busbar Usage

### T889-7



### **Rigid Through connector to suit 88.90** mm Dia. Al. Tubular busbar & AAC Spider conductor for 25KV PT Type-II

Weight Its weight is about 1.66 kg

This item is used to connect Tubular busbar & AAC Spider conductor for

25kv Potential Transformer Type-II

### T889-8



### **Rigid Connector on Section Insulator to** suit 88.9 mm O/D Al. Tubular Busbar

Weight Its weight is about 2.90 kg This item is used on Tubular Usage

busbar

### 88.9 OD Connectors

### T889-9



## Expansion Type Bus Connectors on Section Insulator to suit 88.9mm o/d Al. Tubular Busbar

Weight Its weight is about 6.11 kg
Usage This item is used on Tubular

busbar

### T889-10



Expansion Type Bus Connectors on Section Insulator to suit 88.9mm o/d Al. Tubular Busbar

Weight Its weight is about 6.67 kg
Usage This item is used on Tubular

busbar

### 50 mm IPS Connectors

### T889-11



Expansion Type Universal Bi-Metallic Type Terminal Connector 60 mm dia. Cu. Stud to 88.9 mm dia. Busbar

Weight Its weight is about 9.7 kg

Usage This item is used to connect 60

mm dia. Cu. Stud to 88.9 dia.

Busbar

### 11040 (M)



### TEE Connector to Suit 21 mm. dia. ACSR Panther

Weight Its weight is about 2.21 kg

Usage It is used to connect 21 mm. dia.

ACSR Panther at right angle to the

21 mm. dia. ACSR Panther

### 50 mm IPS Connectors

### 11110 (M)



### Rigid Through Connector to Suit 50 dia. Al. Tubular Busbar & 'Panther' AAC conductor for 25 kv PT Type-II

Weight Its weight is about 2.14 kg

Usage It is used to connect 50 dia. Al.

Tubular Busbar & 'Panther' AAC conductor for 25 kv PT Type-II

### L Shaped Links

### **TLL-30**



### L Shaped Link for Connector to Terminal Pad

Weight Its weight is about

Usage It is used to connect Connector

to Terminal Pad

### **Compression Sleeves**

### S-330



### Compression Sleeve suitable for AAAC 288 sq. mm. (22.05 mm dia.) conductor

Weight Its weight is about 1.2 kg
Usage This item is used to compress

AAAC 288 sq. mm. conductor

### S-331



### Compression Sleeve suitable for ACSR 93 sq. mm. (12.50 mm dia.) conductor

Weight Its weight is about 1.2 kg
Usage This item is used to compress
ACSR 93 sq. mm. conductor

### **Customized Copper Items**

### Cu & Al Bronze







## Our Standard AC Aluminium Products





































































































## Our Products

### **Caps**

### 2064-1



### **Tube Cap 30 mm**

Weight Its weight is about 0.04 kg
Usage This item is used in cantilever

fittings to seal the end of large bracket tube

### 2104-1



### **Tube Cap 40mm**

Weight Its weight is about 0.07 kg
Usage This item is use in cantilever

fittings to seal end of

bracket tube

### 2423-1



### **Tube Cap 25mm**

Weight Its weight is about 0.04 kg
Usage This item is used in cantilever

fittings to seal end of

bracket tube

### **Clamps**



### **Standard Anti-wind Clamp**

	Weight	Usage
2550-1	Its weight is about 0.21 kg	This anti-wind clamp is to be used with BFB steady arm (identification number 2540)
2550-2	Its weight is about 0.25 kg	This anti-wind clamp is to be used with BFB steady arm (identification number 2390)
2550-3	Its weight is about 0.25 kg	This anti-wind clamp is to be used with BFB section steady arm of tramway type OHE (regulated)

### **Clamps**

### 7040



### **Earth Wire Mast Clamp**

Weight Its weight is about 0.67 kg

Usage To support 6/1/4.09 mm. ACSR

earth wire (RACCOON) or AAC 93.3 sq. mm. conductor or 7/3.66 mm.

G.I. Earthwire conductor

### TLP Drg No.TC-3-19 Alternative to R.I. No. 7050



### **Earthwire Strain Clamp**

Weight Its weight is about 1.479 kg

Usage Used as a termination fitting in

6/1/4.09 mm. ACSR earth wire (RACCOON) or AAC 93.3 sq. mm. conductor or 7/3.66 mm. G.I.

Earthwire conductor

### TC-4-34



### **Strain Clamp For 'Zebra' ACSR**

Weight Its weight is about 2.36kg

Usage This is used as a termination

clamp for ACSR 'Zebra'

### **Clamps**

### 1540



### **Bi-metallic Parallel Clamp (10/20)**

Weight Its weight is about 0.47 kg

Usage This item is used to clamp SPIDER

aluminium conductor to 65 sq. mm. cadmium copper catenary (diameter of 10.5 mm) or small jumper with 1 mm thick Bi-

metallic strip

### 1550



### Parallel Clamp (20/20)

Weight Its weight is about 0.86 kg

Usage This item is used to clamp

Aluminium large jumper of diameter

21 mm or SPIDER Aluminium

conductor to another Aluminium large jumper of diameter 21 mm or another

SPIDER Aluminium conductor

### 1560



### **Bi-metallic Parallel Clamp (15/20)**

Weight Its weight is about 0.95 kg

Usage This item is used to clamp SPIDER

aluminium conductor to large jumper wire (105) or feeder wire

(150) with 1 mm thick

bi-metallic strip

### **Clamps**

### **SK-123**



### **Bimetallic Parallel Groove Clamp(14/9)**

Weight Its weight is about 0.626 kg
Usage It is used to clamp 19/2.79 Al.

conductor and 9 mm dia. small jumper with 1 mm. thick

bi-metallic strip

### **SK-231**



### **Parallel Groove Clamp(18/14)**

Weight Its weight is about 0.62 kg
Usage It is used to clamp Al. alloy

conductor of 14 mm. dia. and 15.2

mm dia. large jumper with 1 mm. thick bi-metallic strip

### 1580



### **Large Suspension Clamp 20 mm**

Weight Its weight is about 1.46 kg
Usage It is used to clamp 19/3.99 AAC

**SPIDER** conductor

### 36 mm IPS Connectors

### 6480



36 mm Aluminium Bus Terminal to 25 kv Isolator (Rigid Type) Pad with Bimetallic Strip

Weight Its weight is about 1.75 kg

Usage Aluminium Bus Terminal is used to

connect 25 kv Isolator (Rigid Type)

Pad

### 6490



### **36 mm Aluminium Bus Splice**

Weight Its weight is about 2.23 kg

Usage It is used for splicing straight joints

in 36 mm o/d Aluminium Bus Bar

### 6500



### **36 mm Aluminium Bus TEE Connector**

Weight Its weight is about 2.206 kg

Usage It is used for connecting 36 mm o/d Aluminium bus bar at right

angle

### 6510



### **36 mm Aluminium TEE Terminal**

Weight Its weight is about 1.23 kg

Usage It is used to connect terminal pad

to 36 mm o/d tubular aluminium

busbar

### 36 mm IPS Connectors

### 6520



### Its weight is about 1.93 kg

Weight Its weight is about 1.75 kg

Usage Cadmium catenary (65) tapped

from 36 mm o/d Aluminium Bus Bar for drop out fuse switch in

switching station

### 6530



### **36/20 Terminal Connector**

Weight Its weight is about 1.82 kg

Usage It is used for connecting the 20

mm SPIDER conductor to the 36 mm aluminium bus bar at traction

sub-station.

### 6550



### **36 mm Aluminium Flexible Bus Splice** with Bi-metallic Strip

Weight Its weight is about 5.26 kg

Usage It is used for making expansion

joints in long 36 mm aluminium

bus bar

### 6560



### **36 mm Aluminium Bus Splice Cum Tee Connector**

Weight Its weight is about 3.54 kg

Usage It is used for splicing and

connecting 36 mm o/d aluminium

bus bar at right angles.

### 36 mm IPS Connectors

### 6570



### Flexible Connector for 25 kv Circuit Breaker

Weight Its weight is about 5.13 kg

Usage It is used for making expansion

joints from 36 mm aluminium bus bar to 30 mm copper stud

### 6580



### 36/20 mm Tap Connector

Weight Its weight is about 1.95 kg

Usage It is used for connecting 20 mm

SPIDER connector to the 36 mm

**Aluminium Bus Bar** 

### 6590



### 20 mm Aluminium Bus Bar Tee Connector

Weight Its weight is about 1.73 kg

Usage It is used for connecting 20 mm

aluminium busbar or SPIDER conductor at right angle in sub-

station

### 6800



### Connector for 30 mm Cu. Terminal Stud and 20 mm. SPIDER Conductor

Weight Its weight is about 2.68 kg

Usage It is used to connect 30 mm.

Cu. terminal stud to 20 mm AAC

**SPIDER** conductor

### 36 mm IPS Connectors

### 6830



### Terminal Connector for Aluminium Conductors (bolted type)

Weight Its weight is about 1.32 kg
Usage It is used to connect 20 mm

SPIDER AAC to terminal pad of 132 kv isolator / 132 kv CT & 25 kv PT

type I & II

### 6830-1



### Terminal Connector for Aluminium Conductors (bolted type)

Weight Its weight is about 0.978 kg
Usage It is used to connect 20 mm

SPIDER AAC to terminal pad of 132 kv isolator / 132 kv CT & 25 kv PT

type I & II

### 50 mm IPS Connectors

### 11010



### Bi-metallic Terminal Connector to Suit 'Zebra' ACSR Conductor and 30 Dia. Copper Stud

Weight Its weight is about 2.36 kg

Usage It is used to connect 30 mm dia.

Cu. stud to 'Zebra' ACSR conductor

### 11020



### Bimetallic Terminal Connector Suitable for 50 Dia. Al. Tubular Busbar to 60 Dia. Cu. Stud of 25 kv CT

Weight Its weight is about 6.5 kg

Usage It is used to connect 50 dia. Al.

Tubular Busbar to 60 dia. Cu. Stud of 25 ky Current Transformer

### 11030



220 kv System Bi-metallic Terminal Connector to suit 'Zebra' (28.58 mm. dia.) ACSR conductor to Al./Cu. Pad of CB / Isolator / CT

Weight Its weight is about 1.88 kg

Usage It is used to connect 'Zebra' (28.58

mm. dia.) ACSR conductor to Al./Cu.

Pad of of CB / Isolator / CT

### 11040



220 kv System Tee Connector to Suit 'Zebra' (28.58 mm dia.) ACSR Conductor on Both Ways

Weight Its weight is about 2.15 kg

Usage It is used to connect 'Zebra' (28.58

mm dia.) ACSR conductor to another 'Zebra' (28.58 mm dia.) ACSR conductor at right angles

### 50 mm IPS Connectors

### 11050



### 220 KV. System Rigid Connector on SI to Suit 'Zebra' (28.58 Ø) ACSR Conductor

Weight Its weight is about 1.03 kg
Usage It is used to connect 'Zebra'
(28.58 Ø) ACSR Conductor

### 11060



### Expansion Type Connector to Suit 50 dia. Al. Tubular Busbar to Terminal Pad of 25 kv CT/Isolator/CB & Interruptor

Weight Its weight is about 4.62 kg
Usage It is used to connect expansion

type connector to suit 50 dia. Al. Tubular Busbar to Terminal Pad of 25 kv CT/Isolator/CB & Interruptor

### 11070



### Rigid Type Bimetallic Terminal Connector Suitable For 50 Dia Al. Tubular Busbar To 30 Dia Cu. Stud Of 25 Kv Current Transformer

Weight Its weight is about 1.77 kg

Usage It is used to connect Rigid Type

Bimetallic Terminal Connector Suitable For 50 Dia Al. Tubular Busbar To 30 Dia Cu. Stud Of 25 Kv

**Current Transformer** 

### 11080



### Rigid Type Bi-metallic Terminal Connector Suitable For 50 dia Al. Tubular Busbar To 30 dia Cu. Stud Of 25 kv Current Transformer

Weight Its weight is about 2.30 kg

Usage It is used to connect Rigid Type

Bi-metallic Terminal Connector Suitable For 50 dia Al. Tubular Busbar To 30 dia Cu. Stud Of 25 kv

**Current Transformer** 

### 50 mm IPS Connectors

### 11090



### Rigid Bimetallic Terminal Connector Suitable For 50 dia Al. Tubular Busbar to Terminal Pad Of 25 ky Isolator/CT

Weight Its weight is about 1.77 kg

Usage It is used to connect Rigid Bimetallic

Terminal Connector Suitable For 50 dia Al. Tubular Busbar to Terminal Pad

Of 25 kv Isolator/CT

### 11100



Expansion Type Bi-Metallic Terminal Connector to Suit 50 dia. Al. Tubular Busbar To 30 dia. Cu. Stud Of 25 kv CT / Booster Transformer

Weight Its weight is about 0.768 kg
Usage It is used to connect 50 dia. Al.

Tubular Busbar To 30 dia. Cu. Stud of 25 kv CT / Booster Transformer

### 11110



## Rigid Through Connector to Suit 50 dia. Al. Tubular Busbar & 'Spider' AAC conductor for 25 kv PT Type-II

Weight Its weight is about 1.91 kg
Usage It is used to connect 50 dia. Al.

Tubular Busbar & 'Spider' AAC conductor for 25 kv PT Type-II

### 11120



## Rigid Terminal Connector Suitable For 20 mm dia. Al. Conductor to Terminal Pad Of 110 kv Isolator & 25 kv PT Type I & Type II

Weight Its weight is about 1.43 kg

Usage It is used to connect 20 mm dia. Al.

Conductor to Terminal Pad Of 110 kv Isolator & 25 kv PT Type I & Type II

### 50 mm IPS Connectors

### 11130



### Interconnector Suitable For 50 mm dia Al. Busbar & 'Spider' AAC Conductor (For 25kv P.T. Type-I)

Weight Its weight is about 0.884 kg

Usage It is used to connect 50 mm dia Al.

Busbar & 'Spider' AAC Conductor

(For 25kv P.T. Type-I)

### 11140



### 25 kv System Tee Connector to Suit 50 O/D Al. Tube & 'Spider' AAC Conductor

Weight Its weight is about 1.94 kg
Usage It is used to connect 50 O/D Al.

Tube & 'Spider' AAC Conductor

### 11150



## 25 kv System Tee Connector to Suit 50 O/D Al. Tubular Busbar to 50 O/D Al. Tubular Busbar

Weight Its weight is about 2.31 kg
Usage It is used to connect 50 o/d Al.

Tubular Busbar to 50 o/d Al.

**Tubular Busbar** 

### 11180



### 25 KV. System Rigid Bus Splice Connector to Suit 50 O/D. Al Tube on Both Ways

Weight Its weight is about 2.16 kg

Usage It is used to connect 50 o/d AI tube

on both sides

### 50 mm IPS Connectors

### 11190



### 25 kv System Sliding Clamp for 50 mm Aluminium Busbar

Weight Its weight is about 1.16 kg
Usage It is used to connect 50 mm

**Aluminium Busbar** 

### 11200



### 25 kv System Rigid Connector on SI to 50 mm O/D. Aluminium Busbar

Weight Its weight is about 1.10 kg

Usage It is used to connect 50 mm o/d

Aluminium busbar

### 11210



### 25 kv System Expansion Bus Coupler on SI to Suit 50 O/D Al. Tube

Weight Its weight is about 6.97 kg

Usage It is used to connect Expansion

Bus Coupler on SI to 50 o/d AI.

Tube

### 11220



## Expansion Type Terminal Connector for 25 kv 60 mm Dia. Terminal for Traction Power Transformer

Usage This item is used in Traction Power

**Transformers** 

### 50 mm IPS Connectors





Expansion Type Terminal Connector for 25 kv 30 mm Dia. Terminal for Traction Power Transformer

Usage This item is used with Traction

Power Transformers

### 11240



25 kv System Tee Connector to Suit 36 O/D Al. Tubular Busbar To 50 O/D Al. Tubular Busbar

Weight Its weight is about 2.17 kg

Usage It is used to connect 36 mm o/d Al.

Tubular Busbar To 50 mm o/d Al.

Tubular Busbar

## **Dur Products**

### **Standard Aluminium Items**

### **Joints**



### **Sleeves**



### **Splices**





## Our Standard AC Copper Products







## Our Products













































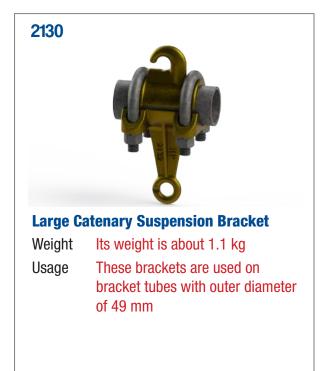






### **Brackets**





### **Clamps**





### **Clamps**





### **Catenary Ending Clamp (65)**

Weight Its weight is about 0.4 kg

Usage This ending clamp is used with

stranded cadmium copper catenary wires with a size of

19/2.10 mm.

### 1130



### **Feeder Ending Clamps (150)**

Weight Its weight is about 0.9 kg

Usage This ending clamp is used with a

standard copper conductor of size

37/2.25 mm

### 1140



### **Large Span Wire Ending Clamp (130)**

Weight Its weight is about 0.9 kg

Usage This ending clamps is used with

large cadmium copper span wire (130 mm2) with a size of 37/2.10

mm

### 1360



### **Steel Wire Ending Clamp (90)**

Weight — Its weight is about

0.9 kg

Usage This ending clamp is used on

galvanized steel wire of size

19/2.6 mm

### **Clamps**









### **Clamps**









# **Clamps**





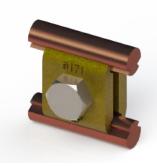
### **Pull Off Clamp**

Weight Its weight is about 1.1 kg

Usage This clamp is used in pull off

assembly

### 1160



## **Suspension Clamp**

Its weight is about 0.5 kg Weight

Usage This suspension clamp is used for

> suspension of Catenary Wire of size 65 mm2 with a diameter of

10.5 mm

# **Clevis**

### 1170



### **Double Suspension Clamp**

Weight Its weight is about 0.7 kg

Usage This clamp is used for suspension

of either of the following

2 Catenary wires of 65 mm2 of

diameter 10.50 mm or

Galvanized steel wire of size

19/2.5 mm and Catenary wire of

65 mm2

# 1270-1



### **Suspension Clevis (18 mm)**

Weight Its weight is about 0.2 kg

Usage This clevis is used for suspen-

sion arrangement with a 9 tonne

insulator

# Clips









# **Connectors**





# **18 mm Bus Terminal (Multiple Bolt)**

Weight Its weight is about 1.0 kg

Usage This terminal is used to connect

bus bar of 18 mm diameter

# 6320



## 18 mm Bus Splice

Weight Its weight is about 1 kg

Usage This splice is used with bus bar of

diameter 18 mm

## 6330



### 18 mm Bus Tee Joint

Weight Its weight is about 1.8 kg

Usage This tee joint is used with a bus

whose diameter is 18 mm

### **Connectors**

1009



## **Terminal Connector (19 mm) Multiple Hole (Bolted Type)**

Weight Its weight is about 1.3 kg

Usage

The connector shall be used for connection of 19/7/1.25 mm (160 mm2) annealed stranded copper large jumper to the following

- 36 mm aluminium bus terminal of Feeding Posts (FP), Sub-sectioning and Paralleling Posts (SSP), Sectioning Posts (SP) and BT location locations
- It is also used for the connection of isolator to OHE.

1010



## **Terminal Connector (15 mm) Multiple Hole (Bolted Type)**

Weight Its weight is about 1.3 kg

Usage

The connector shall be used for connection of 19/7/1.016 mm (105 mm2) annealed

stranded copper large jumper to the following

- 36 mm aluminium bus terminal of Feeding Posts (FP), Sub-sectioning and Paralleling Posts (SSP), Sectioning Posts (SP) and
- BT location locations

It is also used for the connection of isolator to OHE.

### **Sleeves**



# **Splice**



# Thimbles













# Our Products

























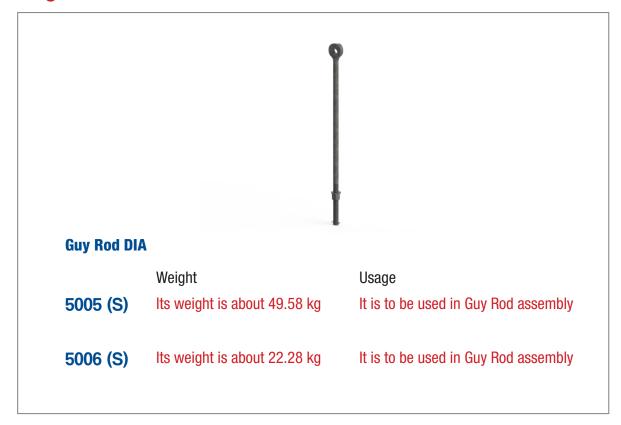


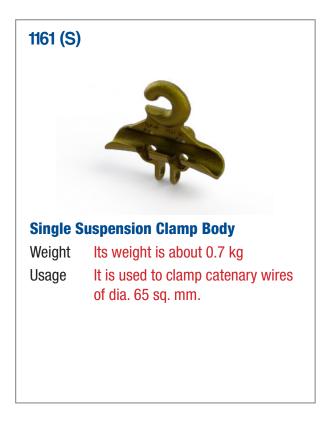






# **Guy Rods**





# **Our Products**

# **DFC Special Items**

# 1171 (S)



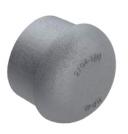
# **Double Suspension Clamp Body**

Weight Its weight is about 0.85 kg

Usage It is used to clamp catenary wires

of dia. 65 sq. mm.

# 2104-1 (S)



## Tube cap (70 mm)

Weight Its weight is about 0.18 kg

Usage It is an end fitting or 70 mm tube

or busbar

# 2131 (S) & 2132 (S)



# **Large Catenary Suspension Bracket Top & Bottom Special**

Weight Its weight is about 2.9 kg

Usage This item is used to hold 70 mm.

bracket tubes

# 2161-2 (S1) & 2162-2 (S1)



# Large Register Arm Hook (Top & Bottom) Special

Weight Its weight is about 2.2 kg

Usage It is used to clamp brackets tubes

of dia, 70 mm.

### 2161-2 (S1) & 2162-2 (S2)



# **Strut Fitting on Large Bracket Tube** (Top & Bottom)

Weight Its weight is about 2.3 kg

Usage This Item is used to clamp bracket tubes of dia. 70 mm for strut fitting

# 2161-2 (S2) & 2162-2 (S3)



# Strut Fitting on Stay Tube of o/d 33.7 mm. (Top & Bottom)

Weight Its weight is about 1.0 kg

Usage This item is used to clamp bracket

tubes of 33.7 mm

# 2277 (S)



### Its weight is about 0.29 kg

Weight Its weight is about 2.9 kg

Usage This item is used to clip 70 mm

**Bracket Tube** 

# 2392 (S)



### **BFB Steady Arm Swivel Special**

Weight Its weight is about 0.52 kg

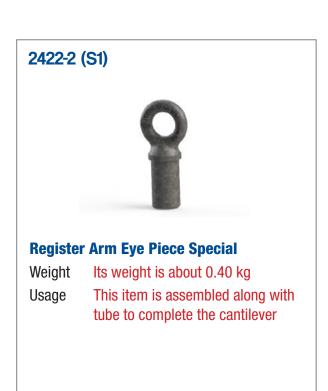
Usage This item is assembled along with

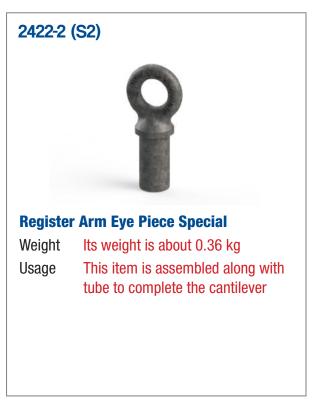
BFB to complete the cantilever



as desired

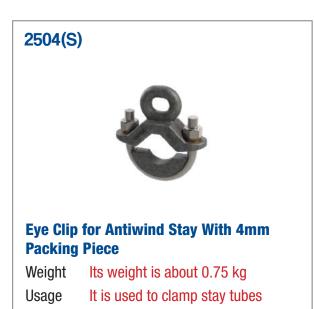


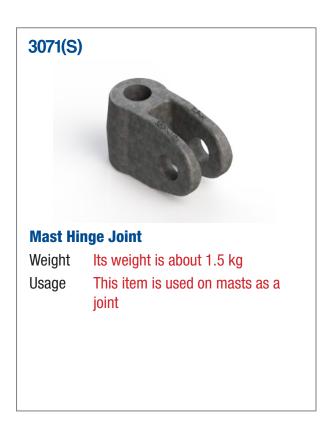










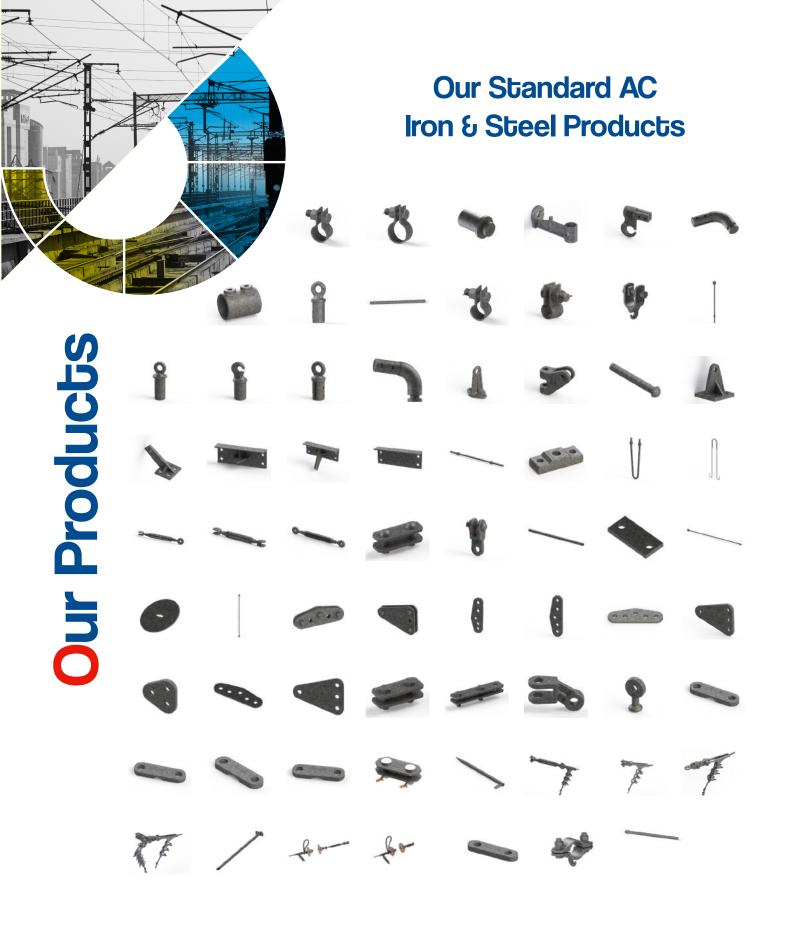


# Our Products

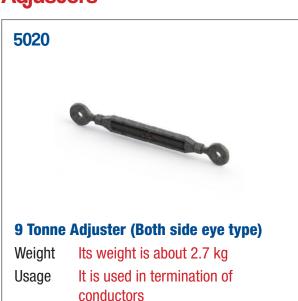
# **DFC Special Items**

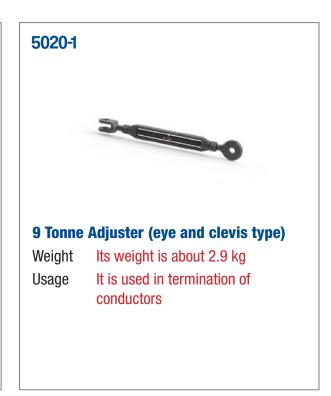
# Counter Weight Eye Rod

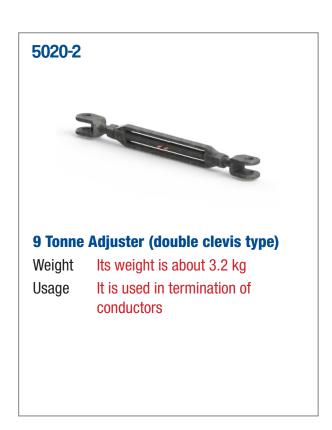




# **Adjusters**

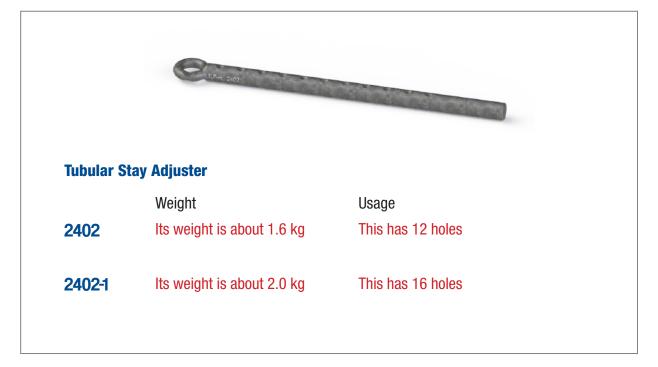






# Iron & Steel Items

# **Adjusters**





# Iron & Steel Items

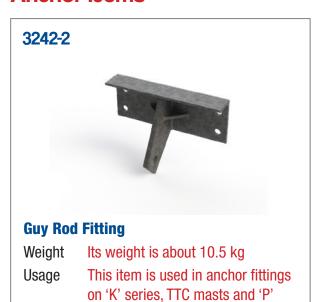
# **Anchor Items**





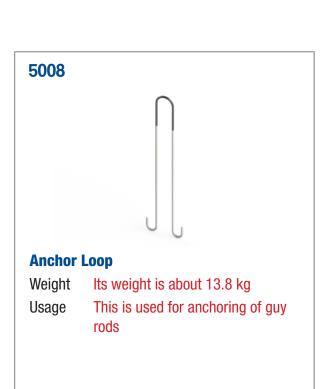


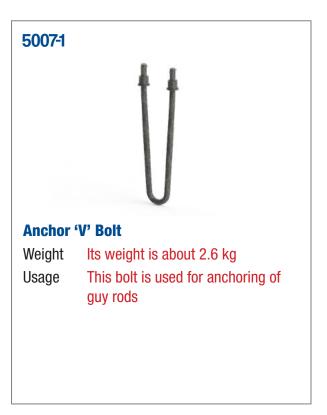
# **Anchor Items**



type portal







# **Brackets**

# 2361-1



### 25 mm Drop Bracket

Weight Its weight is about 1.1 kg

Usage It is used with BFB steady arm

assembly 2390

# **Clamps**

# 6094



# **Post Insulator Jumper Clamp**

Weight Its weight is about 0.4 kg

Usage It is used when aluminium jumper

is directly supported on post

insulator

### 6094-1



### **Post Insulator Jumper Clamp (30 mm)**

Weight Its weight is about 0.7 kg

Usage It is used when Zebra ACSR

Conductor is directly supported on

Post Insulator

### 6095



### **Post Insulator Bus Bar Clamp**

Weight Its weight is about 0.3 kg

Usage It is used where aluminium bus

bar is directly supported on Post

Insulator

# **Clamps**

### 6095-1



# Post Insulator Bus Bar Clamp (50 mm)

Weight Its weight is about 0.3 kg

Usage It is used where aluminium bus

bar with an outer diameter of 50 mm is directly supported on Post

Insulator

### 2490-2



# 25 mm Steady Arm Clamp

Weight Its weight is about 0.7 kg

Usage It is used on 25 mm nominal bore

Register Arm Tube

# **Clevis**

# 5322-1



### **Clevis & Eye**

Weight Its weight is about 0.6 kg

Usage This item will be used with 3:1

ratio three pulley type regulating

equipment

### 3071-1



### **Mast Bracket Clevis (Forged)**

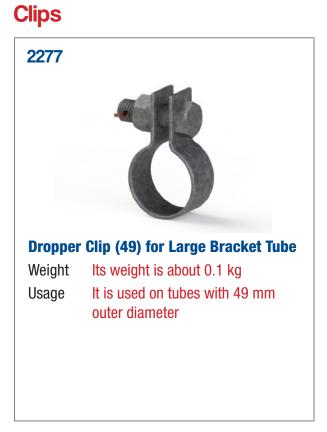
Weight Its weight is about 0.950 kg

# **Clevis**









# **Clips**

### 2461-1



# Dropper Clip (34 mm) for Register Arm Tube

Weight Its weight is about 0.1 kg
Usage It is used on tubes with outer

diameter of 33.7 mm

2471-1



# **Dropper Clip (25 mm) for Raised Register Arm**

Weight Its weight is about 0.1 kg

Usage It is used on raised register arm

adjuster with outer diameter of 25

mm

### 5063-1 & 5067



# **Counter Weight Guide**

Weight Its weight is about 11 kg

Usage This arrangement is used as a

guide for circular counter weights

in regulated OHE termination

### 2274-1



# **Dropper Clip (38) for Standard Bracket Tube**

Weight Its weight is about 0.1 kg
Usage It is used on tubes with outer

diameter of 38 mm.

# **Connectors**

### TI/DRG/OHE/FTGFE/RDSO/00017/22/0



# Tee Connector Suitable for 20 mm GS wire to 20 mm GS wire

Weight Its weight is about 1.5 kg

Usage This connector is used in earthing

arrangement

### TI/DRG/OHE/FTGFE/RDSO/0021/22/0



# Straight Connector Suitable for 20 mm GS wire to 20 mm GS wire

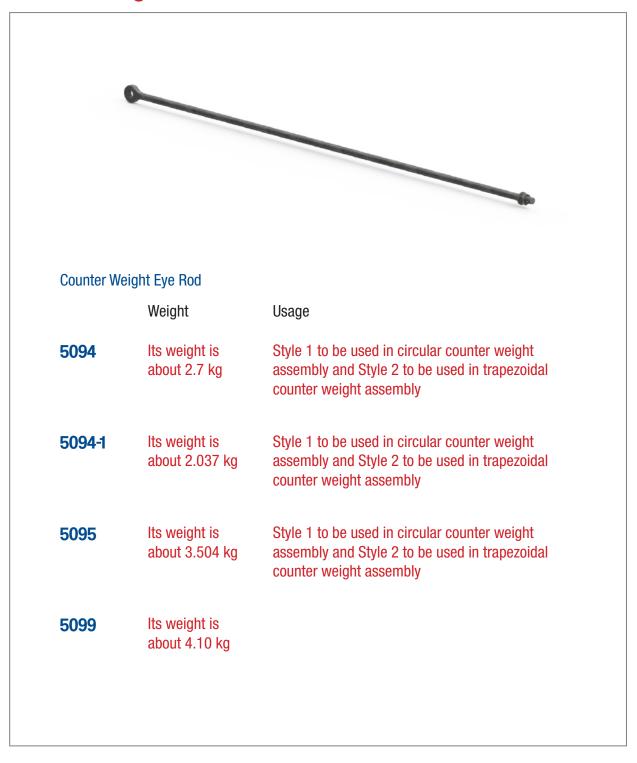
Weight Its weight is about 1.5 kg

Usage This connector is used in earthing

arrangement

# Iron & Steel Items

# **Counter Weight Items**



# Counter Weight Items

# - Weight locale



**5kg. Counter Weight Plate** 

Weight Its weight is about 5.000 kg

# **Distance Rods**



## **Double Eye Distance Rod (20 mm)**

Weight Its weight is about 2.8 kg

# **Electrodes**





## Earth Electrode 3.1 m

Weight Its weight is about 10 kg
Usage To be used in a earth station

**PSI-222** 



### Earth Electrode (4.0 m)

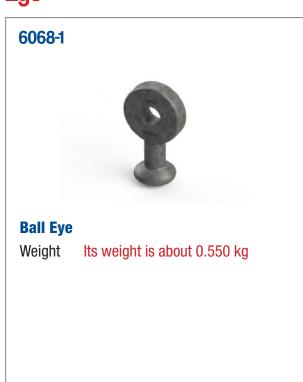
Weight Its weight is about 12 kg

Usage To be used in typical arrangement

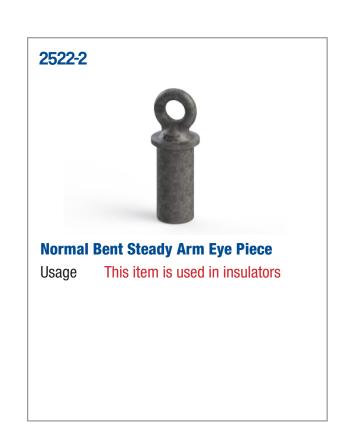
of an earth electrode at traction

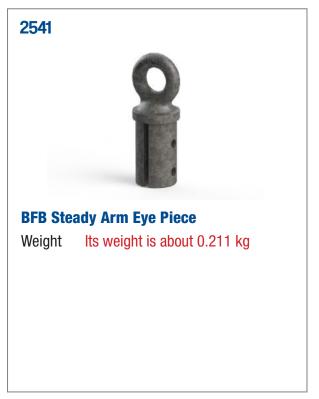
sub-station

# Eye









# **Guy Rod Assembly**





# **Guy Rod Double Strap Assembly (100)**

Weight Its weight is about 2.639 kg
Usage To be used for guy rod assembly fittings.

### 5220-2



## **Guy Rod Double Strap (150/250)**

Weight Its weight is about 4.266 kg
Usage To be used for guy rod assembly fittings.

## 5002



## **Guy Rod Stirrup**

Weight Its weight is about 2.258 kg
Usage To be used for mast fittings.

# Our Products

# Iron & Steel Items

# **Guy Rods**



# Hook





# Large Register Arm Hook Top & Bottom Assembly (Forged)

Weight Its weight is about 1.3128 kg
Usage It is to be used on mast fittings in cantilever & steady arm fittings.

# 2391-1



# Steady Arm Hook (B.F.B) (Forged)

Weight Its weight is about 0.479 kg
Usage It is to be used on mast fittings in

cantilever & register arm fittings.

## 2523



**Normal Bent Steady Arm Hook** 

### 3232



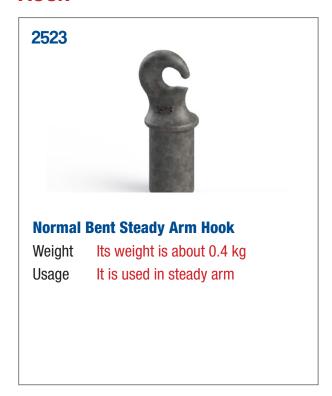
### **Mast Guy Rod (Welded)**

Weight Its weight is about 4.099 kg

# Our Products

# Standard Iron & Steel Items

# **Hook**



# Links

# 1263



# **Strain Clamp Link**

Weight Its weight is about 0.7 kg

Usage This is used in termination fittings

# **Mast Fittings**

### 3231



# **Mast Anchor Fitting (Welded)**

Weight Its weight is about 3.380 kg

# **Mast Fitting**

### 3021-1



### **Mast Fitting for Hook Insulator (Forged)**

Weight Its weight is about 1.137 kg
Usage It is to be used hook insulator.

# **Plates**

### 5190-1



## **Compensating Plate Assembly**

Weight Its weight is about 2.984 kg
Usage It is to be used for conductors
having equal tension and regulated

### **Plates**

### 5191



# **Compensating Plate**

Weight Its weight is about 2.236 kg
Usage It is to be used for conductors
having equal tension and regulated

### 5191-1



# **Compensating Plate**

Weight Its weight is about 1.158 kg
Usage It is to be used for conductors
having equal tension and regulated

5191-2



### **Compensating Plate**

Weight Its weight is about 2.236 kg
Usage It is to be used for conductors hav-

ing equal tension and regulated

5194



### **Compensating Plate**

Weight Its weight is about 1.158 kg
Usage It is to be used for conductors
having equal tension and regulated

### **Plates**

### 5195



# **Compensating 8mm**

Weight Its weight is about 2.236 kg
Usage It is to be used for fixed termination end of regulated

### 5190-2



## **Equalising Plate Assembly**

Weight Its weight is about 5.139 kg
Usage It is to be used on fixed

- It is to be used on fixed termination end of regulated OHE having equal tension of conductor.
- Termination end of unregulated OHE.

### 5192



### **Equalising Plate**

Weight

Its weight is about 3.868 kg

Usage

- It is to be used on fixed termination end of regulated OHE having equal tension of conductor.
- Termination end of unregulated OHE.

### 5193



### **Short Equalising Plate**

Weight Its weight is about 1.463 kg

# **Sleeves**





# **Tubular Stay Sleeve (Forged)**

Weight Its weight is about 0.364 kg
Usage The fitting shall be used with 25 mm nominal bore tube

### 6181-1



# **Section Insulator Double Straps Assembly**

Weight Its weight is about 0.133 kg
Usage to be used in section insulator assembly

# **Swivels**

2392



### **BFB Steady Arm Swivel**

Weight Its weight is about 0.375 kg

# 2542



### **BFB Steady Arm Swivel**

Weight Its weight is about 0.375 kg

# **Swivels**





# **Bent Steady Arm Swivel**

Weight Its weight is about 0.240 kg

# **Termination Fittings**

# 0225 Style 1 & 3



# Earthwire termination – Style 1 & 3

Weight Its weight is about 3.5 kg
Usage This item is used for typical

general arrangement of earth screen wire termination at traction

sub-station

# 0225 Style 2 & 4



### Earthwire termination - Style 2 & 4

Weight Its weight is about 2.5 kg

Usage This item is used for typical

general arrangement of earth screen wire termination at traction

sub-station

# 0225 Style 5



### **Earthwire termination – Style 5**

Weight Its weight is about 3.8 kg

Usage This item is used for typical

general arrangement of earth screen wire termination at traction

sub-station

# **Termination Fittings**





## **Earthwire Termination – Style 6**

Weight Its weight is about 7.8 kg

Usage This item is used for typical

general arrangement of earth screen wire termination at traction

sub-station

# ST 501R Style 1



# **132 Kv String Bus Termination Arrangement for Zebra ACSR**

Weight Its weight is about 10.75 kg

Usage This item is used for terminating

for zebra conductor

# ST 501R Style 2



### **Earthwire Termination**

Weight Its weight is about 8.3 kg

Usage This item is used for terminating

for zebra conductor



# **Our DC-AC Customized** and Standard Products















































# Our Products

# **Customized Copper Items**

# **Parallel Clamps**

# **PG 375**



Parallel Clamp for 160 mm2 Jumper Wire to 129 mm2 Catenary Wire or 105 mm2 Jumper Wire or 150 mm2 wire

# **Ending Clamps**





### **Ending Clamp for 242 mm2 Catenary**

Weight Its weight is about 1.0 kg

Usage This ending clamp is used with 37/2.92 mm (242 mm2) catena-

ry wire

# CW/TD/DC-AC/P/002 aka FM/DC-AC/12



# **Ending Clamp for 193 mm2 Contact**

Weight ts weight is about 1.0 kg

Usage This ending clamp is used for con-

tact wire of size 193 mm2



**Ending Clamp** 

Weight Usage

FM/DC-AC/2 Its weight is about 0.9 kg This ending clamp is used with catenary

wire of size 19/2.95 mm (129 mm2)

FM/DC-AC/20 Its weight is about 1.9 kg This ending clamp is used with 37/3.35

mm (323 mm2) catenary wire

# **Parallel Clamps**

### CR/OHE/DC-AC/102



Parallel Clamp for 160 mm2 Jumper Wire to 242 mm2 Catenary Wire

Weight Its weight is about 0.7 kg

# CW/TD/DC-AC/P/010 aka FM/DC-AC/7



Parallel Clamp for 242 to 129/105/150

Weight Its weight is about 0.7 kg

### CW/TD/DC-AC/P/011 aka FM/DC-AC/14



Parallel Clamp for 50/65 to 242 Catenary

Weight Its weight is about 0.6 kg

### CW/TD/DC-AC/P/012



Parallel Clamp for 242 mm2 Catenary Wire to 242 mm2 Catenary Wire

Weight Its weight is about 1.4 kg

# **Parallel Clamps**





Parallel Clamp for 323 to 129/105/150

Weight Its weight is about 1.4 kg

# FM/DC-AC/13



**Parallel Clamp for 50/65 to 193/129** 

Weight Its weight is about 0.3 kg

## FM/DC-AC/15



Parallel Clamp for 193 Contact to 129/105/150

Weight Its weight is about 0.4 kg

# FM/DC-AC/21



# **Parallel Clamp 160 to 193/129**

Weight Its weight is about 0.6 kg

# **Parallel Clamps**

### FM/DC-AC/22



# Parallel Clamp for 129/105/150 to 129/105/150

Weight Its weight is about 0.6 kg

# FM/DC-AC/23



# Parallel Clamp for Double Contact Wire (193)

Weight Its weight is about 0.1 kg

Usage This clamp is used in 193 sq mm

double contact wire

## FM/DC-AC/24



# Parallel Clamp for 323 Catenary to 160 Jumper

Weight Its weight is about 1.4 kg

### FM/DC-AC/25



# Parallel Clamp for 323 to 323 Catenaries

Weight This clamp is used in two 323 mm2 catenary wire

# **Parallel Clamps**

# FM/DC-AC/33

Parallel Clamp for 323 Catenary to 242 Catenary

Weight Its weight is about 1.4 kg

# **Splicing Clamps**



**Splicing Clamp (Crocodile Type)**Weight Its weight is about 1.6 kg

# **Suspension Clamps**

# CW/TD/DC-AC/P/003



Suspension Clamp for 323/242 Catenary Wire (New Suspension Clamp)

Weight Its weight is about 1.1 kg

# **Suspension Clamps**

# FM/DC-AC/18



# Suspension Clamp for 129 mm2 Catenary Wire

Weight Its weight is about 1.0 kg

# **Dropper Clips**

# 5212



# **Dropper Clip for 193 mm2 Contact Wire** (Antifalling)

Weight Weight – Its weight is about 0.1 kg
Usage It is a dropper clip for 193 sq.
mm. contact wire in DC-AC

current

# **Dropper Clips**

### CW/TD/DC-AC/P/013 aka FM/DC-AC/9



# **Dropper Clip for 193 mm2 Contact Wire (Antifalling)**

Weight Its weight is about 0.1 kg

Usage It is a dropper clip for 193 sq. mm.

contact wire in DC-AC current

### CW/TD/DC-AC/P/014 aka FM/DC-AC/11



# **Dropper Clip for 242 mm2 Catenary Wire**

Weight Its weight is about 0.1 kg

# **Dropper Clips**





**Dropper Clip for 129 mm2 Catenary Wire** 

Weight Its weight is about 0.1 kg

## FM/DC-AC/34



Dropper Clip for 323 mm2 Catenary Wire & 5 mm Solid Wire

Weight Its weight is about 0.1 kg

# **Swivel Clips**

## CW/TD/DC-AC/P/008A aka FM/DC-AC/19



**Contact Wire Swivel Clip for 193 mm2** 

Weight Its weight is about 0.2 kg

# **Copper Sleeve**

### FM-DC-AC-29



### **Copper Sleeve**

Weight — Its weight is about 0.009 kg