#### **PRODUCT CATALOGUE**



## FIBER OPTICAL NETWORK SOLUTION Pole Line Hardware Instruction

Defang provides banding and anchoring solutions for aerial FTTH fiber optic networks. We supply reliable overhead line hardware for outdoor aerial line deployment . Main products Including stainless steel bands , stainless steel buckles , anchor brackets , tension hooks , pole-line bolts etc. All the hardware were long life designed and easy to operating during application.

We are improving our products with excellent design and reliable quality , to meet the new challenges of evolving global information markets.

#### www.defangtech.com

## COMPANY INTRODUCTION

Defang Technology is a leading manufacturer and distributor of cable products, OEM power supplies, Fiber Optic Cables and Terminals.

We are specialized in designing, manufacturing and marketing various Cables (HDMI cable, CAT 5/6 cable, Audio & Video cables, computer cables, Fiber Optic cables), premise equipment power supplies/cables, FTTx Series and telecommunication products.

Majority Of Our products are sold in north America, south America and EMEA. Defang has earned high reputation from our customers for its excellent product quality, outstanding customer service (e.g., product customization, kitting and worry-free shipping and custom clearance) and lowest total cost Of ownership.

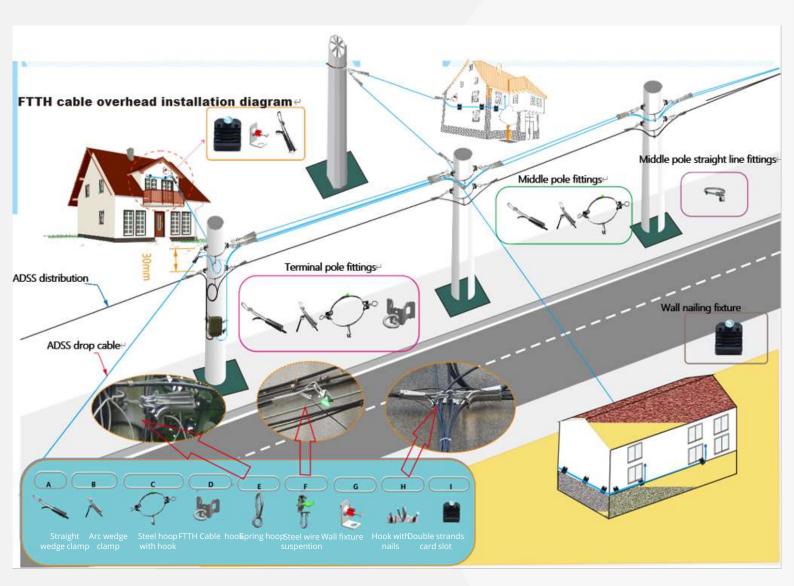
Defang's main office is in Shanghai, China and we have several manufacturing facilities in China and Mexico, all of which are compliant to IS09001 :2000 standards.

Defang is a member Of HDMI Association and has HDMI ATC I .4 certification. All of our products are 100% RoHS compliant.

Defang takes pride in our quality control system and customer service-oriented culture. Our goal is to provide our customers high quality products with IOW cost Of ownership and with superior customer service. We want to be a responsible, flexible and value adding partner of your business.



# FTTH cable overhead installation diagram



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## A: Straight wedge clamp

#### Description

The cable clamp consist of conical shell and unibody designed wedge and wire loop.

In the distribution segment of optical networks, the clamp can be used as drop cables for selfsupporting aerial installation to connect branching points with access points for subscribers.

#### Key Features:

- Easy installation , no require other tools
- Both suitable for round or flat fiber drop cable
- Q195 carbon steel or 304 Stainless steel (the wedge and wire loop can be replaced to plastic)
- Removable and don't hurt cable jacket during application

#### Technical Specifications

Product Number	Round cable diameter	Flat cable size h*w	Application Span	Tensile Strength	Materials
DFHWCSS5-01	5 mm	<4 * (2-7) mm	≤50 m	≤1000 N	Q195 Steel
DFHWCSP5-03	3-6 mm	<4 X <13 mm	≤30 m	≤800 N	304 + Plastic wedge



<sup>\*</sup> Conventional parameters, can be customized according to customer requirements

## B: Arc wedge clamp

#### Description

The cable clamp consist of conical shell, shim and unibody designed wedge and wire loop. In the distribution segment of optical networks in FTTH, the cable can be used as indoor or outdoor drop cables for the self-supporting aerial installation to connect branching points with access points for subscribers.

#### Key Features:

- Easy installation , no require other tools
- Used for flat fiber drop cable
- Q195 carbon steel or 304 Stainless steel(Shell, wedge and shim can be switched to plastic as required)
- Removable and don't hurt cable jacket during application

#### Product image



#### **Technical Specifications**

Product Number	Round cable diameter	Flat cable size h*w	Application Span	Tensile Strength	Materials
DFHWCSP5-01	NA	(2-5) * <(2-13) mm	≤30 m	≤1200 N	304+Plastic shim
DFHWCSS3-01	NA	(2-5) * <(2-12) mm	≤30 m	≤1000 N	304+Black finished
DFHWCSS3-01	NA	(2-5) * <(2-12) mm	≤30 m	≤1000 N	304
DFHWCSS4-01	NA	(2-5) * <(3-5) mm	≤30 m	≤1500 N	304+Black finished
DFHWCPP5-01	NA	(2-5) * <(2-13) mm	≤30 m	≤1200 N	All plastic

## More commonly used clamps

#### S Type dead-end fiber clamp

#### **Description**

The S Type dead - end FTTH fiber clamp is designed to anchor and support flat or round fiber optical cable on dead - end routes during outdoor FTTH network constructions.

#### Product image



#### Key Features:

- Easy installation , no require other tools
- Both suitable for round or flat fiber drop cable
- 201 or 304 Stainless steel and UV resistant plastic
- Removable and don't hurt cable jacket during application
- Good insulating property
- High mechanical strength

#### Technical Specifications

Product Number	Round cable diameter	Flat cable size	Application Span	Tensile Strength	Materials
DFHWCP-S01	Ф0.4~1.5 mm	2.0 * 3.0 mm	≤50 m	≤1200 N	PA + 304
DFHWCP-S02	Ф0.4~1.5 mm	2.0 * 3.0 mm	≤50 m	≤800 N	Nylon + 304
DFHWCP-S03	Ф0.4~1.5 mm	2.0 * 3.0 mm	≤50 m	≤800 N	Nylon + 304 With Closed hoop

## More commonly used clamps

#### ADSS Wedge Type anchor clamp

#### **Description**

Wedge type anchor Clamp is designed to tension the ADSS optical fiber cable on aerial poles. It is applied together with fiber optical cable on straight routes of maximum distance up to 70 meters

#### Product image



#### Key Features:

- Hand installation , no request other tools
- UV resistant polymer stainless steel material guarantee long period usage
- Self- adjustable wedge , enough to keep cable in tight strength position

#### Technical Specifications

Product Number	ADSS cable size	Wire bail	Application Span	Tensile Strength	Materials
DFHWCP-S04	5 mm	Φ2.5 mm	≤50 m	≤2000 N	PA + Q195
DFHWCP-S05	4~14mm	Φ2.5 mm	≤50 m	≤2000 N	Polymer + 304
DFHWCP-S06	6~9mm	Φ2.5 mm	≤70 m	≤3000 N	Polymer + 304
DFHWCP-S07	12~16mm	Φ2.5 mm	≤100 m	≤6000 N	Polymer + 304

## More clamps can be found from us



## C: Steel hoop with hook

#### **Description**

The steel hoop with hooks is used on communication poles for setting anchoring clamp point.

The steel hoop Fiber optic cable hoop was designed to applied with wooden , concrete or metal poles , it provide 6 points for drop wire clamp , usually used in aerial fiber to home ( FTTH ) line constructions .

#### Key Features:

- Easy installation , only need screwdriver during application
- Adjustable diameter
- Hot-dip galvanized steel plate and weatherproof hardware fitting
- Used together with wedge clamp
- High mechanical strength

#### Technical Specifications

Product Number	Pole application diameter	Tensile Strength
DFHHP-01	170~230 mm	≤2500 N

#### \* Conventional parameters, can be customized according to customer requirements



## More commonly used hoop

## Stainless steel strapping banding and buckle

#### Description

Stainless steel strapping banding is designed for attaching cable clamps , such as suspension clamps , tension clamps and hooks , on dead end and intermediate routes of main or end-use electrical connections.

Stainless steel buckle is applied with stainless steel strapping bandings and banding tools

#### Key Features:

- Need banding tool to install
- Adjustable diameter
- 201 or 304 Stainless steel and weatherproof hardware fitting
- Rounded edges and a smooth surface
- Used together with suspension clamp and hooks
- High mechanical strength

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#### Technical Specifications

Product Number	Width	Thickness	Materials	Length
DFHBB-01 buckle	1/2″	0.05″	304	
DFHBB-03 buckle	3/4″	0.05″	304	
DFHBB-05 strapping banding	1/2″	0.03"	304	100ft, 30m,50m
DFHBB-06 strapping banding	3/4″	0.03″	304	100ft, 30m,50m
DFHBB-04 banding tool	< 20 mm	<1.5 mm	Galvanized steel	



## More commonly used hoop

## Plastic strapping banding and buckle

#### **Description**

Plastic strapping banding is designed for attaching cable clamps , such as suspension clamps , tension clamps and hooks , on dead end and intermediate routes of main or end-use electrical connections.

Strap Material is extruded from a black Polyoxymethylene resin, has long-term creep resistance, long-term fatigue resistance and excellent resistance to UV, moisture, chemicals, solvents and fuels

#### Key Features:

- Need banding tool to install
- Adjustable diameter
- Polyoxymethylene resin
- Used together with suspension clamp and hooks
- High mechanical strength

#### Technical Specifications

Product Number	Width	Thickness	Materials	Length
DFHBB-07 banding	1/2″	0.055″	Polyoxymethylene resin	100ft, 50m
DFHBB-08 buckle	1/2″	NA	Plastic + 304	

#### \* Conventional parameters, can be customized according to customer requirements





## E: Spring hoop

#### **Description**

The hoop on poles is used as the anchor contact point for spring buckle to make flexible connection.

It is designed to tension, or suspension drop cable wire clamps or FTTH anchor clamps with suitable fiber optical cable in outdoor overhead FTTH network constructions.

#### Key Features:

- Easy installation , no require other tools
- Flexible layout of various use scenarios for clamp and hook
- Galvanized steel material, metal, corrosion resistant and durable
- High mechanical strength

#### Product image



#### Technical Specifications

Product Number	Tensile Strength
DFHHP-02	≤600 N

## D: FTTH C type cable hook

#### **Description**

The FTTH C type hook is used on communication poles for setting anchoring clamp point.

It is designed to tension, or suspension drop cable wire clamps or FTTH anchor clamps with suitable fiber optical cable in outdoor overhead FTTH network constructions.

#### Key Features:

- Easy install and operate to save labor cost
- Apply with drop clamp on dead end route
- Galvanized steel material, metal, corrosion resistant and durable
- Can be installed wooden and building by screws
- High mechanical strength

#### Technical Specifications

Product Number	Tensile Strength
DFHBH-09	≤1500 N





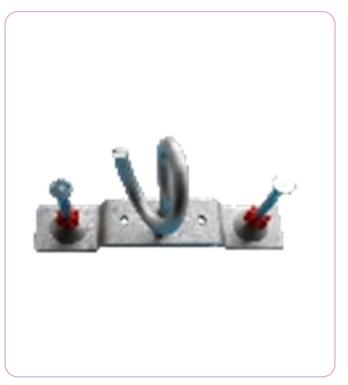
## H: Hook with nail

#### **Description**

The hook is used to set an anchoring point on walls after nail both side on walls to provide a more powerful tensile strength.

It is designed to tension, or suspension drop cable wire clamps or FTTH anchor clamps with suitable fiber optical cable in outdoor overhead FTTH network constructions.

#### Product image



#### Key Features:

- Easy installation , only need screwdriver during application
- Flexible layout of various use scenarios for clamp and hook
- Galvanized steel material, metal, corrosion resistant and durable
- High mechanical strength

#### Technical Specifications

Product Number	Tensile Strength
DFHBH-10	≤400 N

#### More commonly used Hook and bracket

#### Cable anchoring clamp bracket

#### **Description**

The cable anchoring clamp bracket is designed to tension, or hook drop wire clamps with suitable fiber optical in outdoor overhead FTH network constructions.

#### Product image



#### Key Features:

- Apply with tension clamp on dead end route
- Compact size but with high mechanical strength
- Galvanized steel material , corrosion resistant and durable
- Can be installed wooden , metal , concrete poles or building by bolt or stainless-steel band
- Fixed by stainless steel band (20-10 mm ) or four 4mm diameter bolts

#### Technical Specifications

Product Number	Tensile Strength
DFHBH-11	≤1500 N

#### More commonly used Hook and bracket

#### Universal pole bracket

#### **Description**

The universal pole bracket designed for tension and suspension the ADSS fiber optic cable clamps or Figure eight fiber optic cable clamps , in fiber optic cable deployment of outdoor telecommunication networks.

#### Product image



#### Key Features:

- Three fixation points
- Easy installation
- Stainless steel strapping application
- Pole Bolt and nut application
- High mechanical strength

#### Technical Specifications

Product Number	Tensile Strength
DFHBH-12	≤9000 N

#### More commonly used Hook and bracket

#### **Fiberglass Extension Arm**

#### **Description**

Fiberglass Extension Arm Pole Mount Bracket Suspension Clamp are used in aerial construction to provide a set distance from the Utility Poles for mounting Suspension Clamps.

#### Product image



#### Key Features:

- Cleats to prevent bracket rotation on poles
- Accepts 5/8" (16mm) Mounting Hardware
- Both End Fittings are made of high strength Ductile Iron.
- Reinforced Epoxy Fiberglass Rod diameter is 1-1/2" (38mm).
- Secured using either traversing bolts or a double stainless-steel banding on the pole.

#### Technical Specifications

Product Number	Length	Minimum Ultimate Vertical Load
DFHBH-01	12"	≤6000 N
DFHBH-07	24"	≤5000 N
DFHBH-08	36″	≤4000 N

#### More hooks and brackets can be found from us



# F: The steel wire suspension clamp

#### **Description**

The steel wire suspension is fixed on the steel wire, be used to set an anchoring point on steel wire.

It is designed to tension, or suspension drop cable wire clamps or FTTH anchor clamps with suitable fiber optical cable in outdoor overhead FTTH network constructions.

#### Key Features:

- Easy installation , no require other tools
- Flexible layout of various use scenarios for clamp and hook
- Galvanized steel material, metal, corrosion resistant and durable
- High mechanical strength

#### Product image



#### Technical Specifications

Product Number	Tensile Strength
DFHSC-05	≤600 N



## More commonly used wire suspension

#### J type suspension clamp

#### **Description**

J type ADSS suspension clamp is developed for to suspending and supporting ADSS cable in outdoor overhead FTH solutions . This optical fiber cable accessories can be installed on short spans at intermediate poles.

#### Product image



#### Key Features:

- Easy operating , no need other tools
- UV resistant plastic and galvanized steel , durable
- Applied with stainless steel bands and pole bolts
- High mechanical tensile strength

#### Technical Specifications

Product Number	Cable Size	Tensile Strength
DFHSC-06	8-15 mm	≤4000 N
DFHSC-07	5-8 mm	≤4000 N



## More commonly used wire suspension

#### **Cable Suspension Clamp**

#### **Description**

Used to attach strand to straight line pole. Features grooves for greater clamping area without damage to guy strand. Bolts have shoulders to prevent turning when nut is tightened.

#### Product image



#### Key Features:

- Accepts 3/16"(6M) to 1/2"(25M) strand
- Consists of two plates , and two 1/2" track bolts with attached nuts
- Plates are 1-11/16" wide and 5-3/4" long
- Center hole accepts 5/8" Thru Bolts
- Carton steel with hot dip galvanized
- High mechanical tensile strength

#### **Technical Specifications**

Product Number	Strand Size
DFHSC-01 straight clamp	3/16"(6M) to 1/2"(25M)
DFHSC-02 angel clamp	3/16"(6M) to 1/2"(25M)



#### More suspension clamps can be found from us

### Universal pole bracket



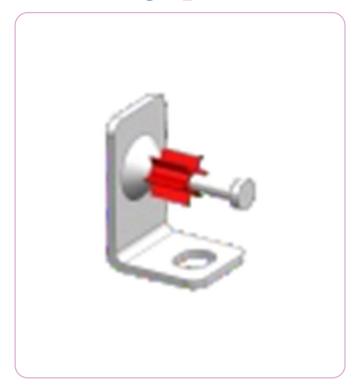
## **G: Wall fixture**

#### **Description**

The wall fixture is used to set an anchoring point on walls after nail on walls.

It is designed to tension, or suspension drop cable wire clamps or FTTH anchor clamps with suitable fiber optical cable in outdoor overhead FTTH network constructions.

#### Product image



#### Key Features:

- Easy installation , only need screwdriver during application
- Flexible layout of various use scenarios for clamp and hook
- Galvanized steel material, metal, corrosion resistant and durable
- High mechanical strength

#### Technical Specifications

Product Number	Tensile Strength
DFHBB-15	≤100 N

## More commonly used fixture or Fastener

#### Bolts with nuts and washers

#### **Description**

Bolt with nuts is used for fastening pole line hardware to crossarms, poles, and other structures

#### Product image



#### Key Features:

- Easy installation , only need screwdriver during application
- Galvanized carbon steel or stainless steel, corrosion resistant and durable
- High mechanical strength

#### Technical Specifications

Product Number		Length , inch	Materials
DFHBB-01 with nut	5/8"	10"	Galvanized carbon steel
DFHBB-02 with nut	5/8"	12"	Galvanized carbon steel
DFHBB-04 with nut	5/8"	16″	Galvanized carbon steel
DFHBB-05 with nut	5/8"	18″	Galvanized carbon steel
DFHBB-06 with nut	5/8″	20″	Galvanized carbon steel
DFHBB-10 with nut and washer	7/16″	1.5″	Stainless steel
DFHBB-11 with nut and washer	7/16"	1.8″	Stainless steel

## I: Double strands card slot

#### **Description**

The double strands card slot is a kind of optical cable fittings, and it is used to hold the drop cable along the wall after nail it, In FTTH tail installation, it is widely used to solve the cabling on outdoor wall.

#### Product image



#### Key Features:

- Easy installation , only need screwdriver during application
- Flexible layout of various use scenarios for clamp and hook
- Galvanized steel material, and the plastic part is ABS
- UV resistant for ABS part, durable

#### Technical Specifications

Product Number	Tensile Strength
DFHSC-08	≥50 N

# J: Helical strand wire

#### **Description**

The helical strand wire, other called preformed guy grip or dead-end guy grip is developed to grip and tension ADSS cable during construction of internet network lines on wooden or concrete poles, as analogy of classical wedge type tension clamps

#### Product image



#### Key Features:

- Easy operation , no need other tools
- Made of hot dip galvanized steel , weather resistant
- With sand and glue to improve friction between cables
- Customized products is available upon requests
- High tensile strength

#### Technical Specifications

Product Number	ADSS Cable size, mm	Wires configuration	Length, mm	Tensile Strength , KN
DFHDES2X3	4.4-4.9	2.0 * 3	450	0.5~2
DFHDES2X4	8.5-9.4	2.0 * 4	450	4~7
Product Number	Strand rope ,mm2	Wires configuration	Length, mm	Tensile Strength , KN
DFHDES3X6	90	3.0 * 6	960	100
DFHDES3X5	38	2.8 * 5	660	42
DFHDES2X3-02	35	2.0 * 3	430	8
DFHDES2.5X5	30	2.5 * 5	610	32

#### More helical strand wire can be found from us

