

# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

### FILUX MULTIPOINT SERVICE TERMINAL

#### GENERAL FEATURES

This document will serve as guide for installation method of the products:

- 4 PORTS FILUX MULTIPOINT SERVICE TERMINAL
- 6 PORTS FILUX MULTIPOINT SERVICE TERMINAL
- 8 PORTS FILUX MULTIPOINT SERVICE TERMINAL
- 12 PORTS FILUX MULTIPOINT SERVICE TERMINAL

Includes hardened adapters that protect the mechanical splices.

Mounting options for aerial, pole, pedestal, hand holes, man holes and wall installations.

Please refer to the next pages whenever doubts surge.

Cable length (feet)	
50	100
150	200
250	300
350	400
450	500
550	600
650	700
750	



4 PORTS FILUX MULTIPOINT SERVICE  
TERMINAL



6 PORTS FILUX MULTIPOINT SERVICE  
TERMINAL



8 PORTS FILUX MULTIPOINT SERVICE  
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12 PORTS FILUX MULTIPOINT SERVICE  
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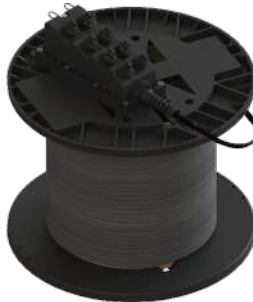
Cable length (feet)	
800	850
900	950
1000	1100
1200	1300
1400	1500
1600	1700
1800	1900
2000	



4 PORTS FILUX MULTIPOINT SERVICE  
TERMINAL



6 PORTS FILUX MULTIPOINT SERVICE  
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8 PORTS FILUX MULTIPOINT SERVICE  
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12 PORTS FILUX MULTIPOINT SERVICE  
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# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

### FILUX MULTIPOINT SERVICE TERMINAL

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# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

### FILUX MULTIPOINT SERVICE TERMINAL 50FT - 750FT CABLE

To follow this procedure the installer must receive the Multipoint Service Terminal product including the following elements.



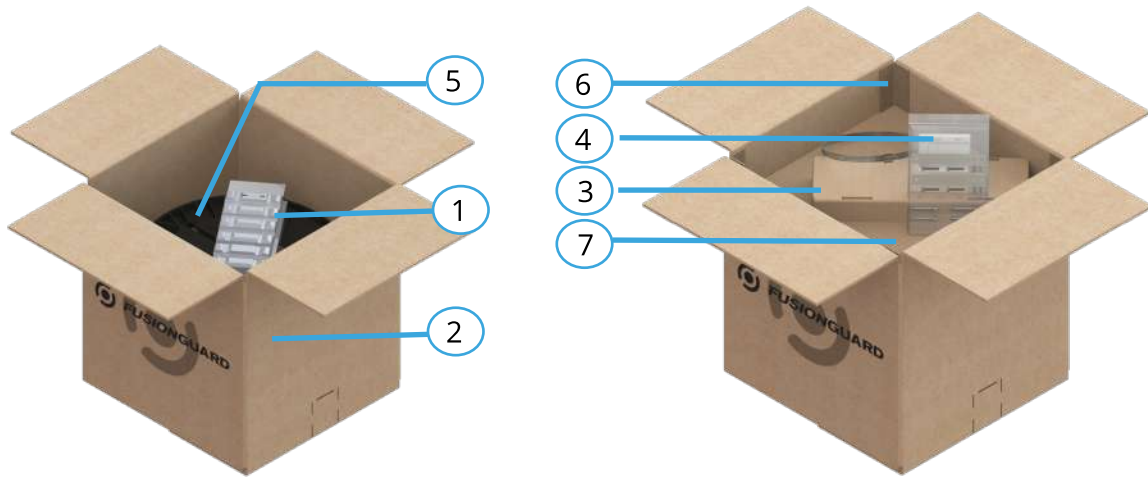
	Description	Quantity
1	FILUX MULTIPOINT SERVICE TERMINAL	1 piece
2	Individual Box	1 piece
3	Cardboard protector	1 piece
4	Installation kit and IL RL Test Report	1 pieces
5	Preconnectorized Flat Drop Cable customizable from 50ft to 750ft	50ft to 750ft
6	Polyethylene plastic paper	118in
7	Cardboard insert	1 piece
8	Plastic straps	4 pieces

# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

### FILUX MULTIPOINT SERVICE TERMINAL 800FT - 2,000FT CABLE

To follow this procedure the installer must receive the Multipoint Service Terminal product including the following elements.



	Description	Quantity
1	FILUX MULTIPOINT SERVICE TERMINAL on a reel	1 piece
2	Individual Box	1 piece
3	Cardboard protector	1 pieces
4	Installation kit and IL RL Test Report	1 pieces
5	Reel preconnectorized Flat Drop Cable customizable from 800ft to 2000ft	800ft to 2,000ft
6	Cornerbacks cardboard	4 pieces
7	Cardboard insert	1 piece

# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

### KIT INSTALLATION FOR FILUX MULTIPOINT SERVICE TERMINAL



This kit includes:

	Description	Quantity
1	Expansion plugs M8 x 1.0	4 pieces
2	Metallic holder to aerial installation	2 pieces
3	Metallic brace to pole installation	1 pieces
4	Metallic clamps to aerial installation	2 pieces
5	Allen screw M5 x 0.8	4 pieces
6	Pan head screw M5 x 0.8	4 pieces
7	Nut M5 x 0.8	4 pieces

With this kit, it can be simpler install the Multipoint Service Terminal on walls, poles or make aerial installations.



# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

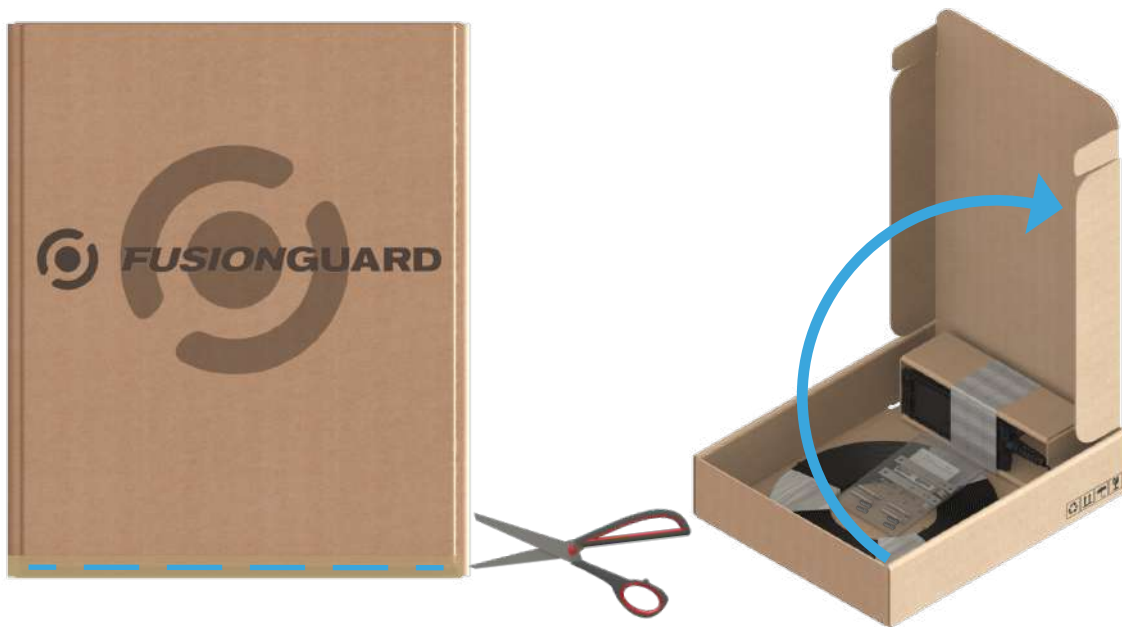
### UNPACKING PROCESS OF FILUX THE MULTIPOINT SERVICE TERMINAL 50FT - 750FT CABLE.

It is recommendable to have the next tools:

- Cutter knife or scissors

To unpack the FILUX MULTIPOINT SERVICE TERMINAL product:

Start opening the Individual Box using the cutter knife or scissors cutting the tape that seal the box.



# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

Take the installation kit, cut the plastic paper and the plastic straps that fix the Flat Drop cable and the cardboard protector of the Filux Multiport Service Terminal.



Take off the cardboard protector and release the FILUX MULTIPOINT SERVICE TERMINAL.





# FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL

Pick up the coil and the FILUX MULTIPOINT SERVICE TERMINAL and remove the Individual Box.

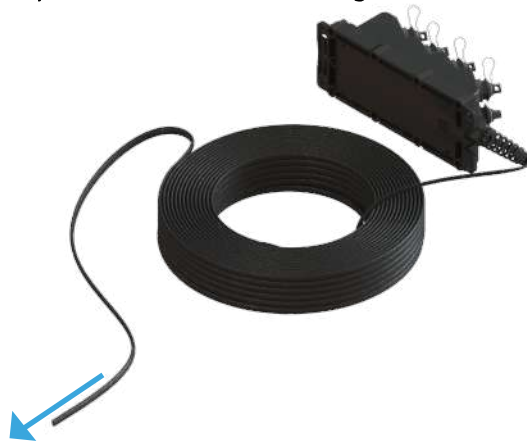


## UNCOILING PROCESS OF THE FILUX MULTIPOINT SERVICE TERMINAL 50FT - 750FT CABLE.

Identify the end of the Flat Drop cable. It has to be protected with a heat shrink tube.



Take the tip and pull it to proceed with the uncoiling.



# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

### UNPACKING PROCESS OF FILUX THE MULTIPOINT SERVICE TERMINAL 800FT - 2,000FT CABLE.

To unpack the FILUX MULTIPOINT SERVICE TERMINAL product:

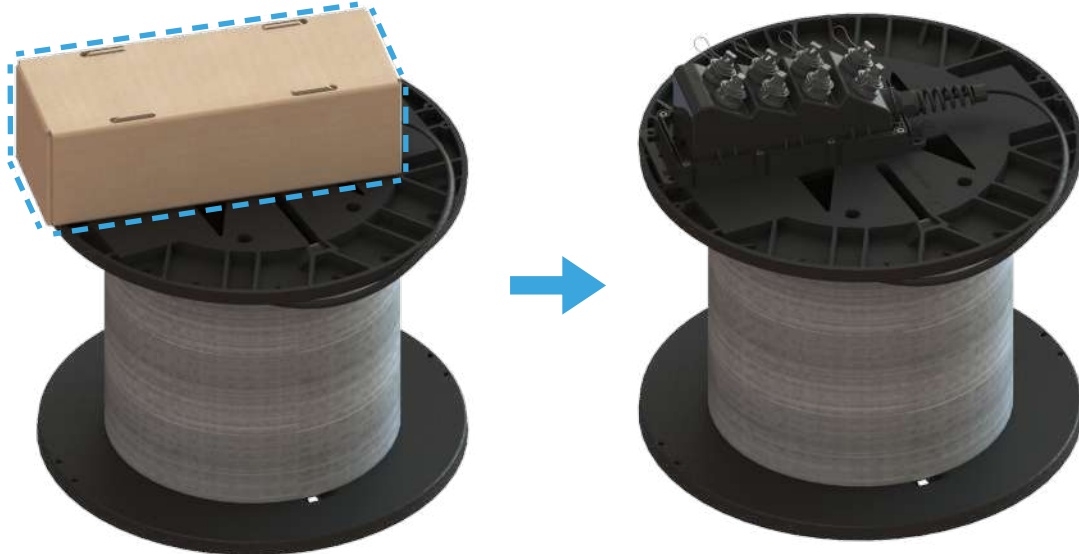
Start opening the Individual Box, take out the cardboard protector and remove the Cornerbacks cardboard.

Pick up the FILUX MULTIPOINT SERVICE TERMINAL product.

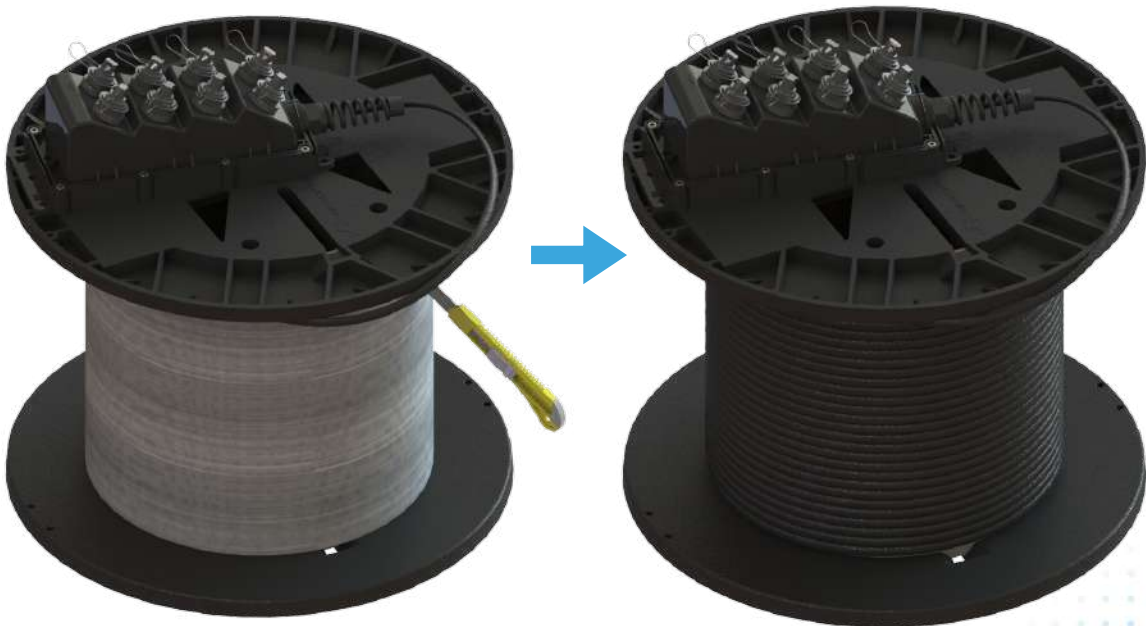


## FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL

Remove the cardboard protector.



The preconnectorized Flat Drop Cable has a bubble wrap plastic that protect it. Using a cutter knife or scissors cut the bubble wrap plastic.



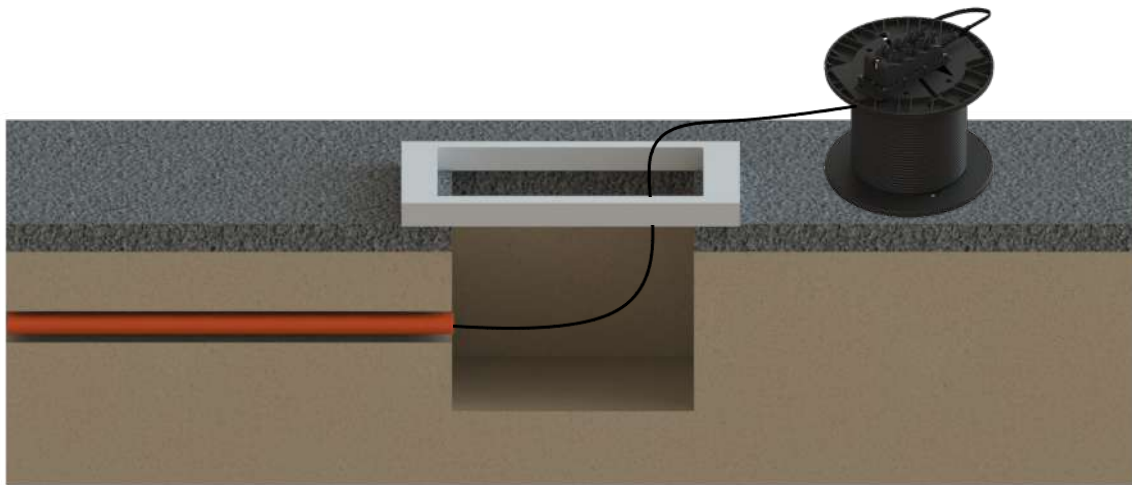
# FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL

Take the tip and start the uncoiling process.



Note: It can be used the deploy method proposed for the customer.

The flat drop cable is ready for an underground installation method.



# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

### MAN-HOLE, HAND-HOLE INSTALLATION

For a man-hole or hand-hole installation process the next pieces will be required:

- 4, 6, 8 or 12 PORTS FILUX MULTIPOINT SERVICE TERMINAL: 1 piece.



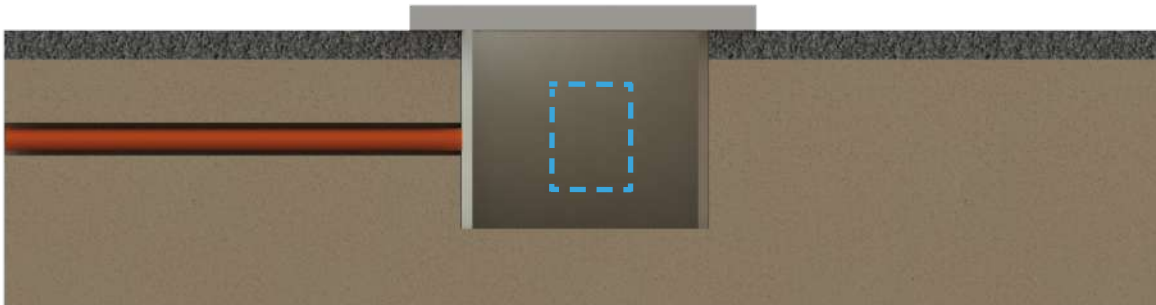
- Expansion plugs M8 x 1.0: 4 pieces included on the installation kit.



It will be necessary have the tools to make the blast-holes on the wall and to screw the expansion plugs.

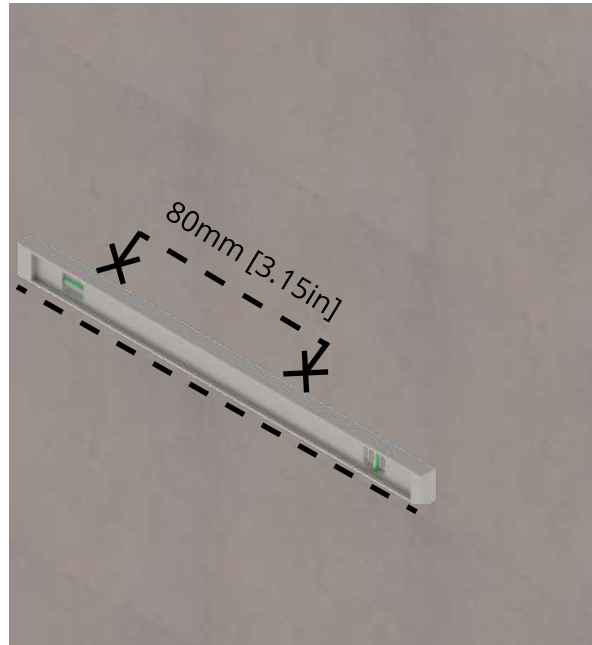
#### **Installation process.**

To begin with the installation process, determinate the area on the man-hole or hand-hole where is going to be mount the Multipoint Service Terminal.

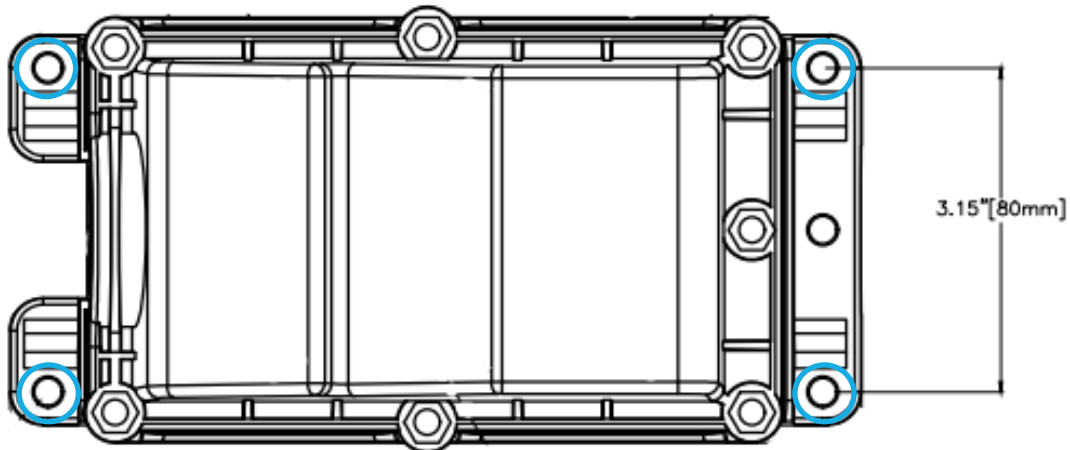




# FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL



The distance between the centers of the blasted holes for a wall mount installation is 80mm [3.15"]



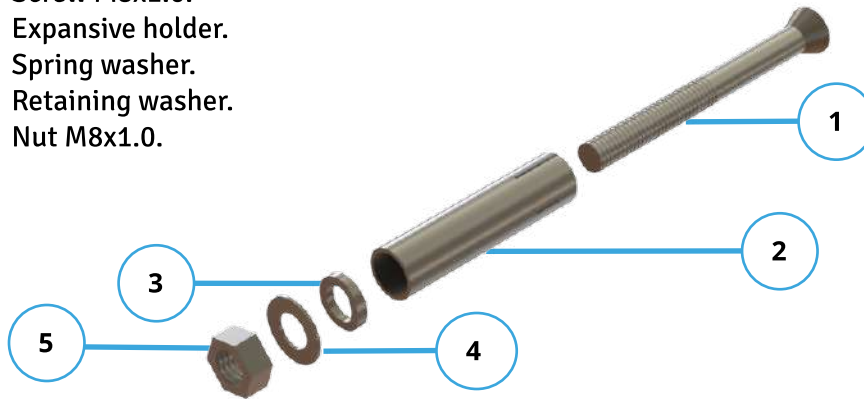


## FIBER OPTIC NETWORK CABLE SOLUTIONS

### INSTALLATION MANUAL

The pieces of an expansion plug M8x1.0 are:

1. Screw M8x1.0.
2. Expansive holder.
3. Spring washer.
4. Retaining washer.
5. Nut M8x1.0.



Using a drill and concrete bits make the blast-holes on the wall for the Multiport Service Terminal installation holes according with the standardized measures of concrete bits corresponding to the screw M8x1.0.



It is recommendable to make the blast-holes using a 6.5mm [1/4"] and a 8mm [5/16"] bits.

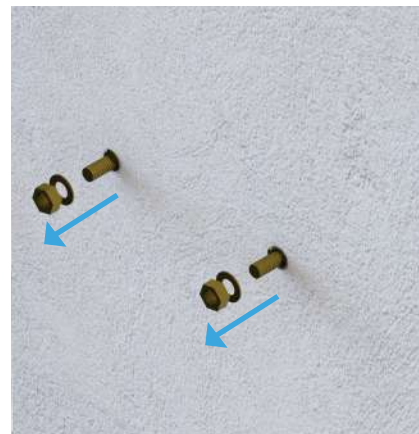
Note: make the drill hole profundity according with the length of the expansive holder and the screw M8x1.0 head. It is about 37mm.

To install the Multiport Service Terminal on the wall, first introduce the expansion plug M8x1.0 on the hole blasted, make sure that the slotted part of the expansive holder is aligned with the screw M8x1.0 head. It can be easier using a rubber hammer.

## FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL



Remove the nut M8 and the spring washer.



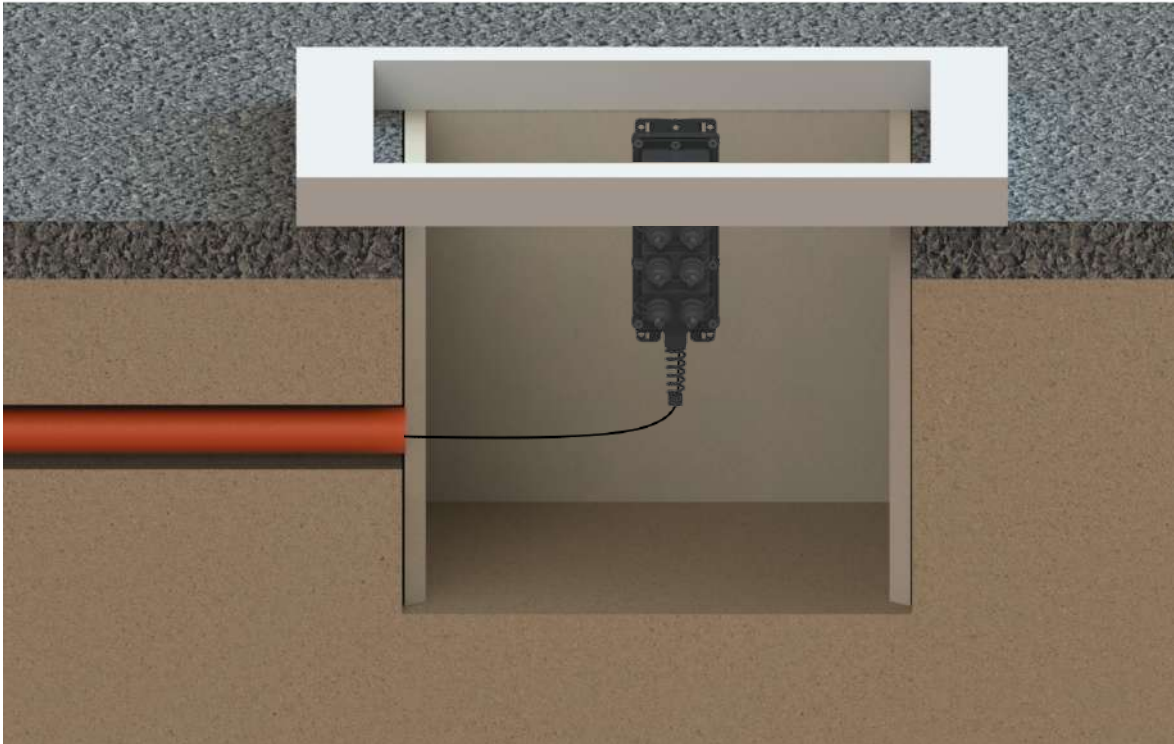
Align the multiport service terminal installation hole with the free part of the screw M8x1.0. Insert again the spring washer and the nut M8 in that order.



Note: Use a ratchet wrench or an adjustable spanner to fix or release the nuts.

# FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL

## RESULT OF THE MAN-HOLE OR HAND-HOLE INSTALLATION



# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

### WALL MOUNT INSTALLATION

For the wall installation process the next pieces will be required:

- 4, 6, 8 or 12 PORTS FILUX MULTIPOINT SERVICE TERMINAL: 1 piece.



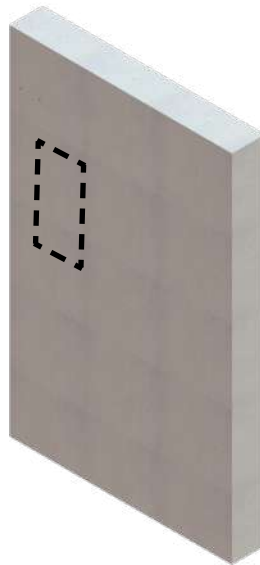
- Expansion plugs M8 x 1.0: 4 pieces included on the installation kit.



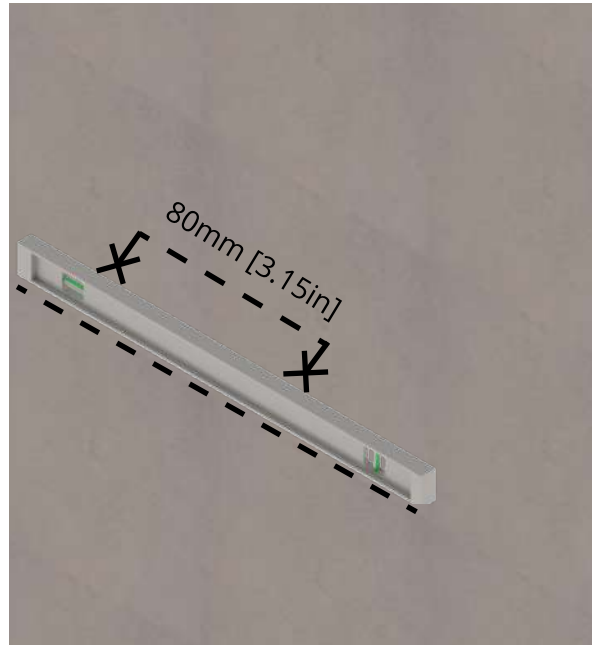
It will be necessary have the tools to make the blast-holes on the wall and to screw the expansion plugs.

#### **Installation process.**

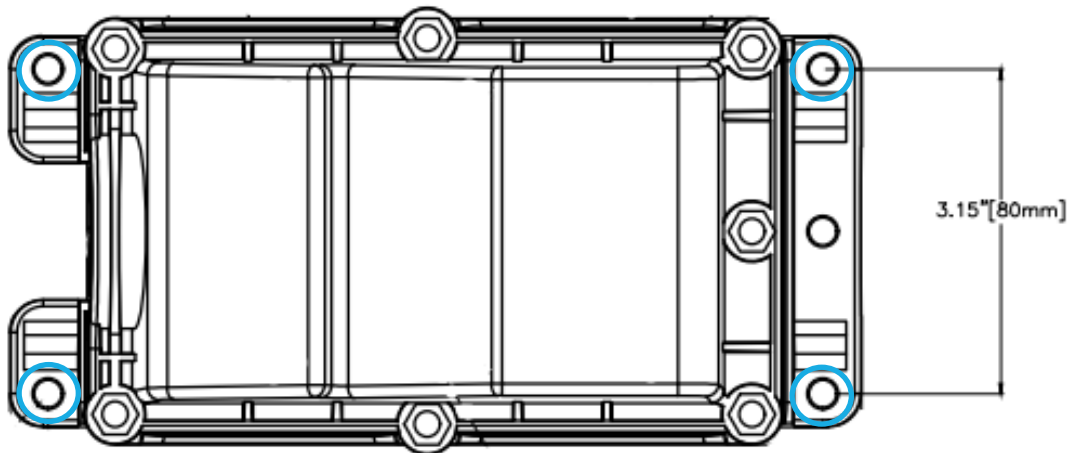
To begin with the installation process, determinate the area on the wall where is going to be mount the Multipoint Service Terminal.



# FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL



The distance between the centers of the blasted holes for a wall mount installation is 80mm [3.15"]

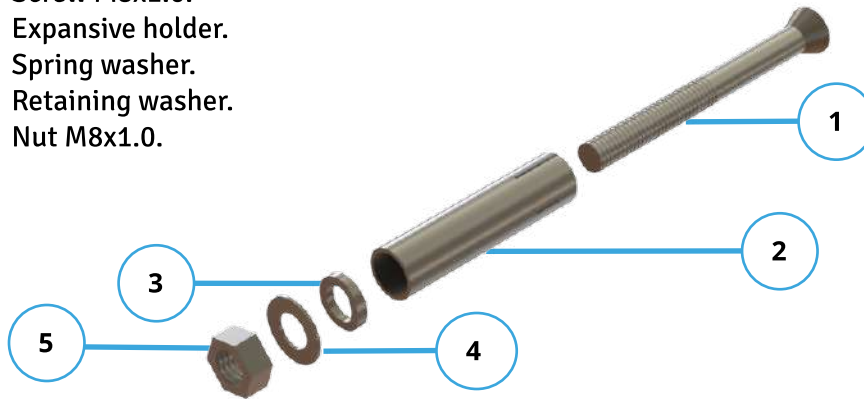




## FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL

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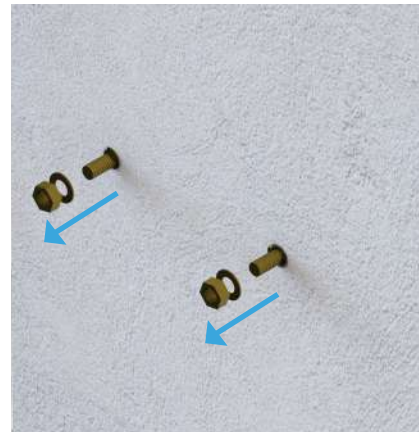
To install the Multiport Service Terminal on the wall, first introduce the expansion plug M8x1.0 on the hole blasted, make sure that the slotted part of the expansive holder is aligned with the screw M8x1.0 head. It can be easier using a rubber hammer.



# FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL



Remove the nut M8 and the spring washer.



Align the multiport service terminal installation hole with the free part of the screw M8x1.0. Insert again the spring washer and the nut M8 in that order.



Note: Use a ratchet wrench or an adjustable spanner to fix or release the nuts.



# FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL

## RESULT OF THE WALL MOUNT INSTALLATION



# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

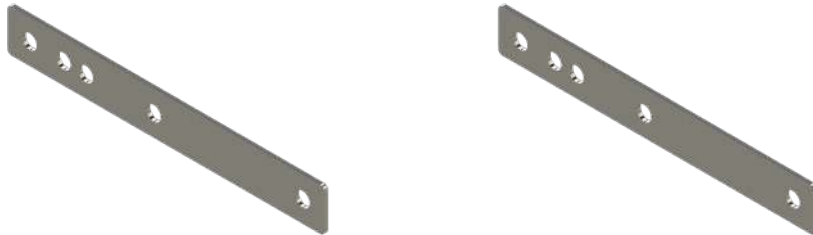
### AERIAL INSTALLATION:

For the wall installation process the next pieces will be required:

- 4, 6, 8 or 12 PORTS FILUX MULTIPOINT SERVICE TERMINAL: 1 piece.



- Metal holder to aerial installation: 2 pieces includes on the installation kit.



- Flat screws M5x0.8: 4 pieces.



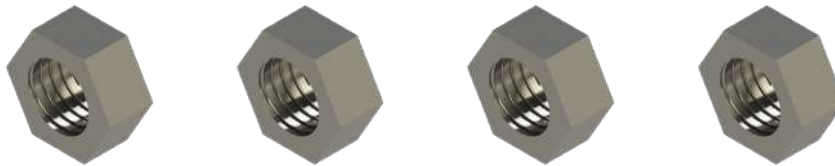
- Socket screw M5x0.8: 4 pieces.



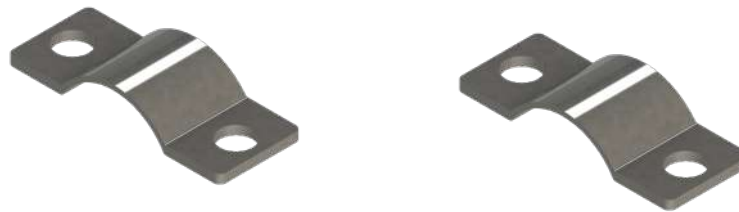
## FIBER OPTIC NETWORK CABLE SOLUTIONS

### INSTALLATION MANUAL

- Nut. 4 pieces M5x0.8: 4 pieces.



- Steel brace 3.4 x 1.2 x 1.49 mm: 2 pieces.



#### Installation process

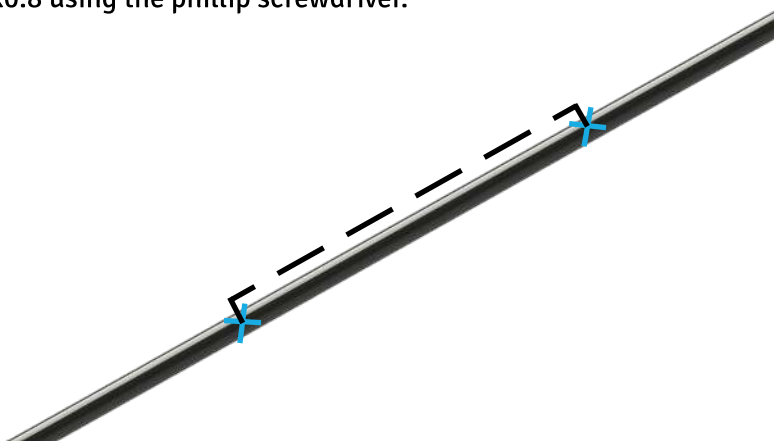
If it requires an aerial installation of the multiport service terminal it is necessary to have.

- Phillip screwdriver.
- Socket screwdriver

#### Installation Process:

Determine the transmission line where the multiport service terminal it is going to be installed.

Identify the slots where the metal holders fix and proceed to put on the four slots the Flat screws M5x0.8 using the phillip screwdriver.

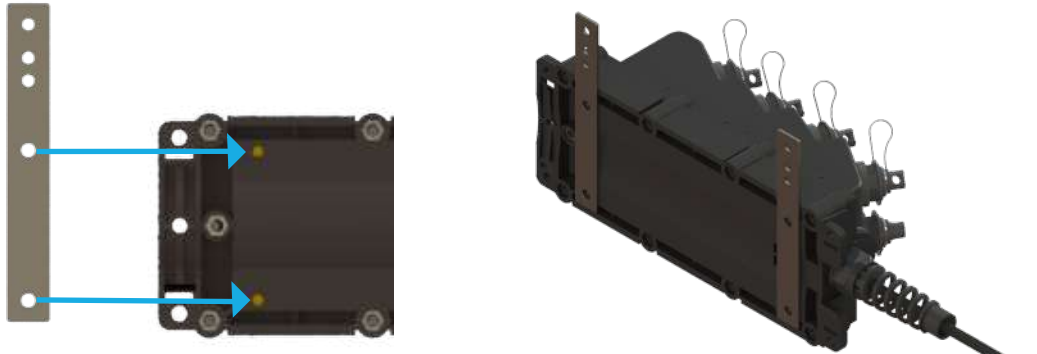


Note: The maximum diameter of the cable for aerial installations can be of 19mm [3/4"].

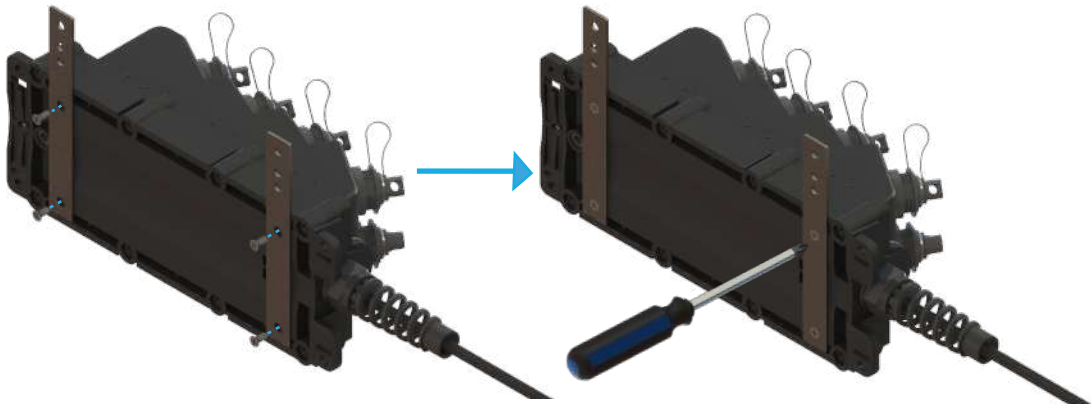
# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

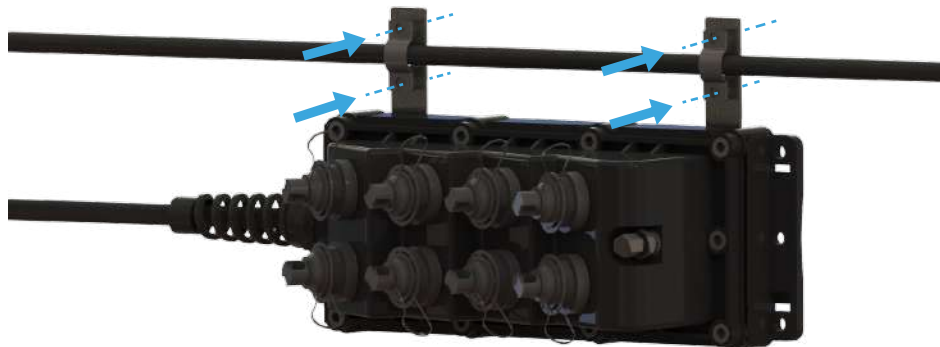
Align the attachment points of the Multiport Service Terminal with the slotted holes of the metal holder.



Insert the flat screws M5 X 0.8 fixing the metal holders to the base of the Multiport Service Terminal using a phillip screwdriver.



Hold the Multiport Service Terminal using the steel braces included on the kit. Put the steel holders on the cable trough the steel braces and align their drill holes.





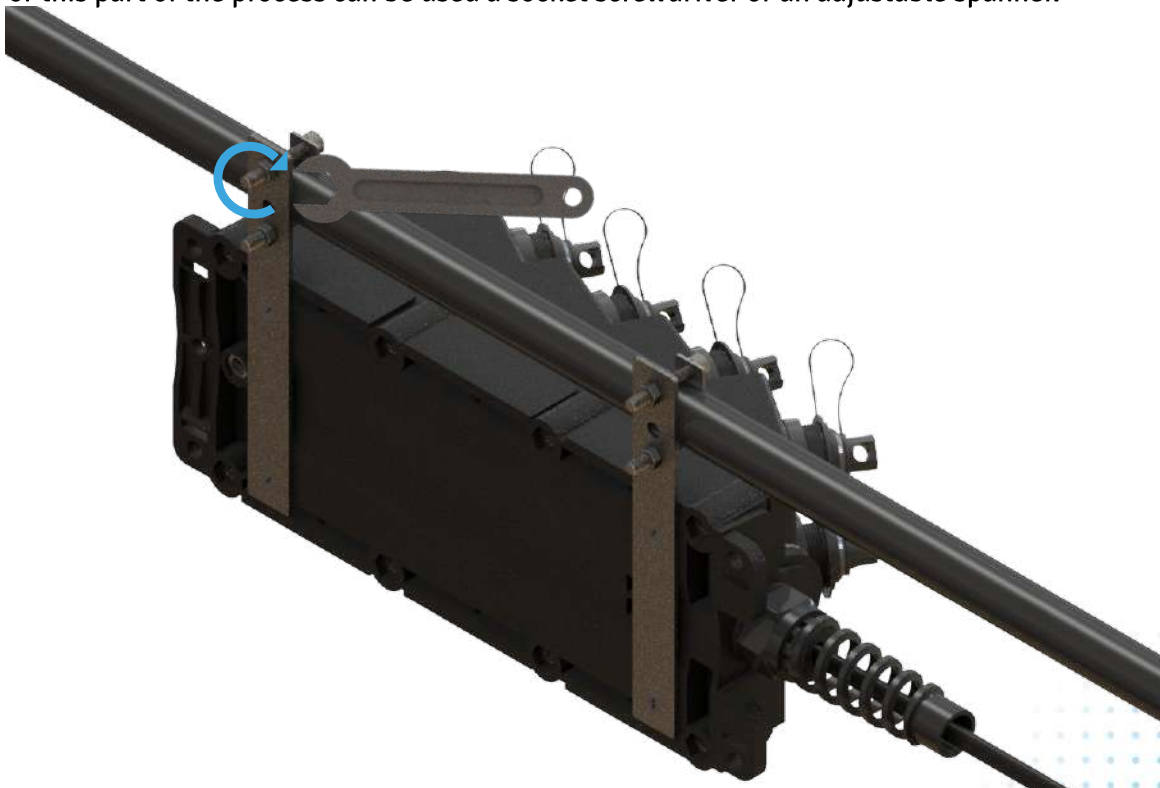
## FIBER OPTIC NETWORK CABLE SOLUTIONS

### INSTALLATION MANUAL

Introduce the socket screws M5 X 0.8, make sure that the head of the screws is in parallel with the case of the Multiport Service Terminal.



Pin up the socket screws M5 X 0.8 using the nuts M5 X 0.8. For this part of the process can be used a socket screwdriver or an adjustable spanner.

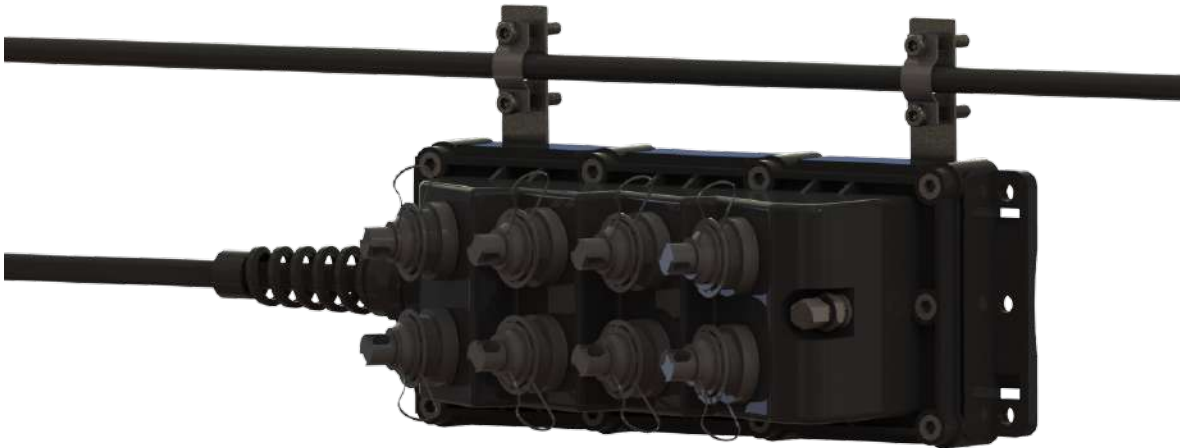




# FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL

## RESULT OF THE AERIAL INSTALLATION

### FRONT VIEW



### BACK VIEW



# FIBER OPTIC NETWORK CABLE SOLUTIONS

## INSTALLATION MANUAL

### POLE INSTALLATION:

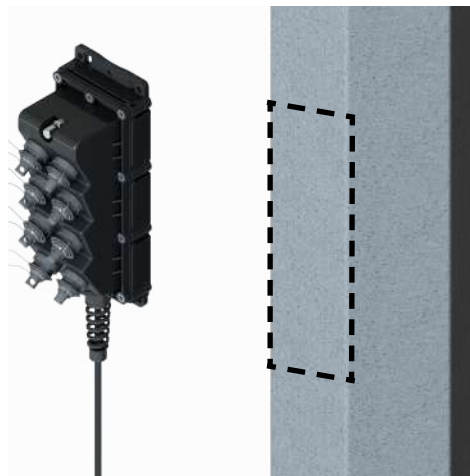
For the wall installation process the next pieces will be required:  
4, 6, 8 or 12 PORTS FILUX MULTIPOINT SERVICE TERMINAL: 1 piece.



- Metallic brace to pole installation: 1 piece



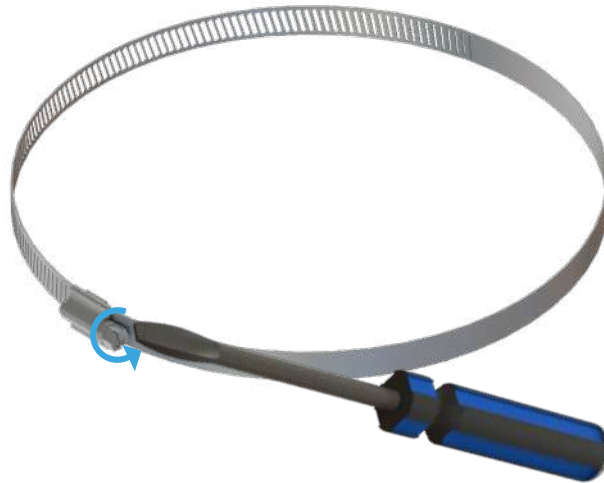
Firstly identify the pole where the Multipoint Service Terminal is going to be installed and determine the area.



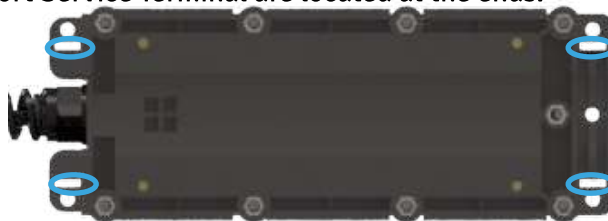
Note: The maximum pole diameter where it can be installed the Multipoint Service Terminal is 203.2 mm.

## FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL

Take the metallic brace and using a flat-head screwdriver release the wedges until the strip open.



The gaps of the Multiport Service Terminal are located at the ends.



Place the Multiport Service Terminal on the pole, take the tip that does not have the endless screw and go through the Multiport Service Terminal gap.

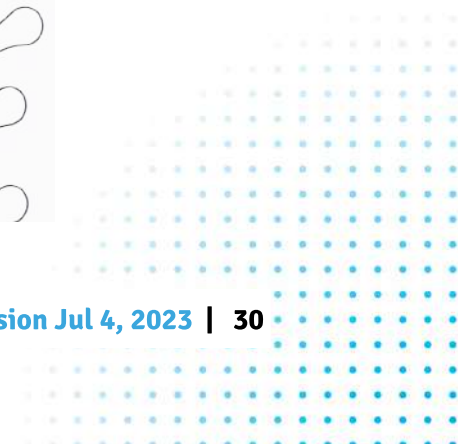


## FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL

Surround the strip around the pole and fit the tip on the other gap.



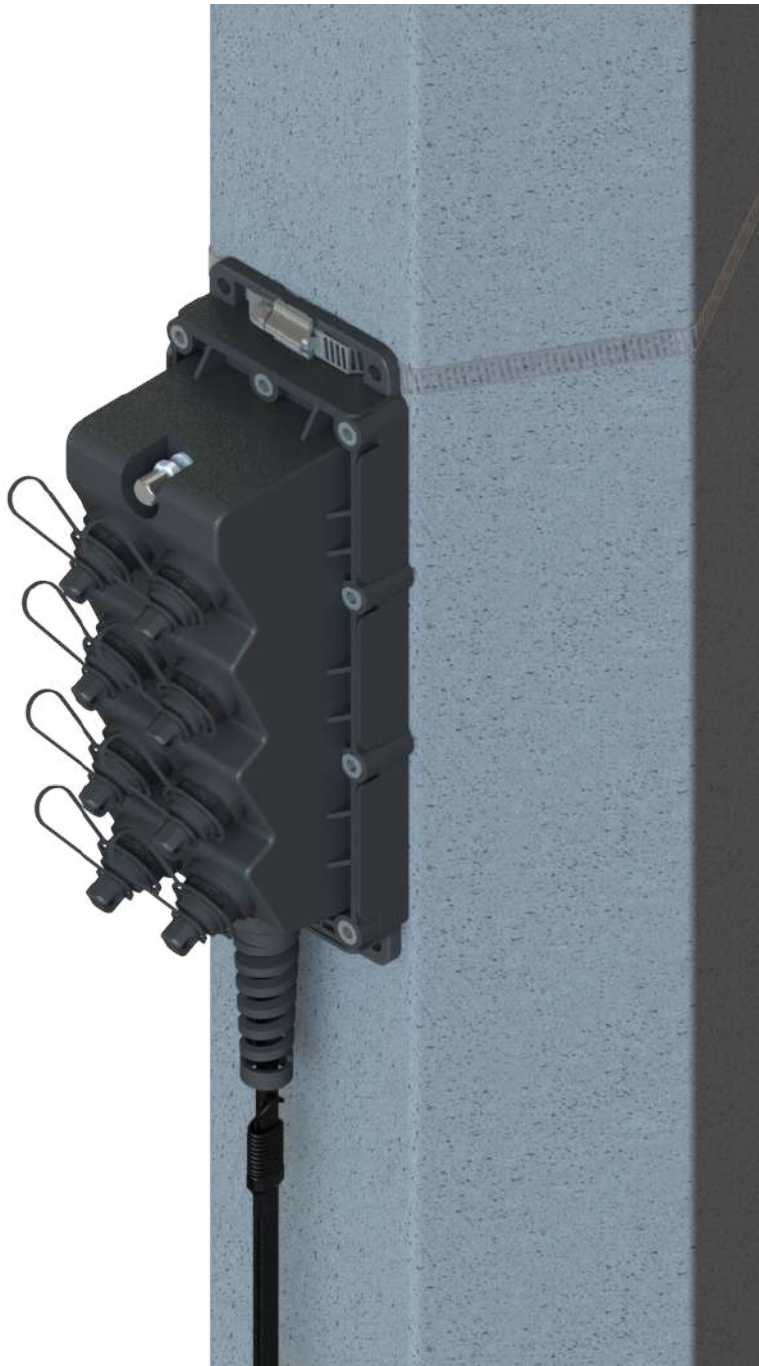
Insert again the tip on the suggestion clamp and using the flat-head screwdriver fix the metallic brace to the pole.





# FIBER OPTIC NETWORK CABLE SOLUTIONS INSTALLATION MANUAL

The result.



# FIBER OPTIC NETWORK CABLE SOLUTIONS

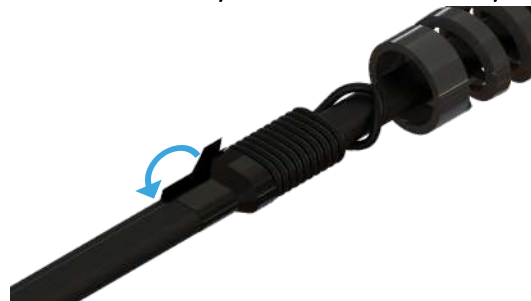
## INSTALLATION MANUAL

### Unpack the toneable reference.

The cable has a section of the toneable detached and packed in plastic paper near of the Multiport Service Terminal.



To unpack it, the first step is take the bend tip of the blue scotch tape and start to unroll the plastic paper. Then take the second bend tip of the blue scotch tape and start to unroll it again.



Finally start to uncoiling the toneable.

