COMMSCOPE®

FST-T FLEXIBLE SERVICE TERMINAL

Contents

1.   About this Installation Instruction

This installation instruction describes the installation of the FST-T terminal, the full size hardened adapter and the DLX® adapter. The instruction will explain how to handle the terminal and factory integrated adapter drop ports, how to mount the terminal (hand hole and pedestal), how to connect and maintain the different adapter types (full size, DLX and HMFOC).

The FST-T is a compact sealed terminal with hardened connectivity for reliable plug-n-play distribution to customer premises. Featuring pre-connectorized hardened full size or DLX adapter drops, CommScope's FST-T enables FTTH deployment in brown field and green field applications, with or without coax in place. Primarily designed for pedestal and hand hole applications, the terminal provides fast, easy network connections in space-constrained environments. The FST-T terminal is available with 4, 8 or 12 drops and an HMFOC cable with either no pin or pinned adapter.

2. Required Tools

- Screw driver
- 216B key tool
- Cleaning kit (FHD-ACC-CLNKIT1)

3. Symbols In These Instructions

The Installation Instruction uses the following icons and fonts to indicate special messages for the reader.

	Note	Presents useful information related to *Installation Guide* contents, the references and data related to the product's use, etc.

	Warning	Optical terminal Do not look at the optical terminal directly. It could cause serious damage to your eyes.

4. Using Hardened Connectors and Adapters

4.1.   Hardened connectors and adapters provide sealed environmental protection for the subscriber drop cable connector and the SC adapter mounted within the FST-T optical port. The following sections provide a description of the connector and adapter components and provide instructions for connecting or disconnecting the drop cable to/from the optical ports.

4.2.   The basic components of the drop cable connector are shown in Figure 1. The dust cap threads onto the connector coupling nut. A pair of O-rings on the connector body provide a tight seal when the dust cap is in place.
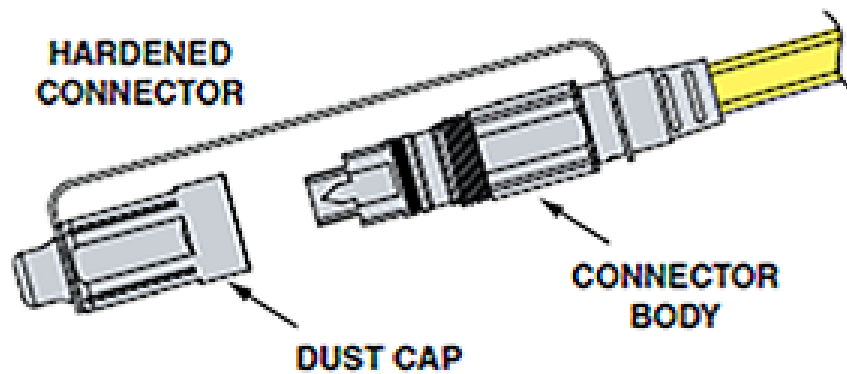

Figure 1

5. Parts List

Kit Contents

Item #	Description	Figure
1	FST-T Terminal	2
2	Mounting Bolt	3
3	Nut	4
4	Washer	5

Figure 2

Figure 3

Figure 4

Figure 5

6.   Product Installation

Notes to consider before installation

Before installing and using FST-T, the user should fully understand the warnings and notes explained in this section.

🚫 **Warning - Danger: Infrared radiation is invisible and can seriously damage the retina of the eye. Do not look into the ends of the optical connectors or adapters or exposure to laser radiation may result. Use an optical power meter to verify if an optical signal is present. Do not assume the laser power is turned off or that the fiber is disconnected at the other end. The dust cap MUST be immediately placed over any radiating optical connector to avoid the potential of dangerous amounts of radiation exposure. This practice also prevents dirt particles from entering the connector.**

Do not disassemble the product

The user should not disassemble the product. If the user thinks a repair is necessary, contact the CommScope Technical Support Team.

Installation site condition

For safe and stable use, the product should be installed in a site satisfying the following conditions:

6.1.   Avoid locations where temperature is too high or low.

6.2.   Keep the product surroundings clean and dust-free both during and after installation.

Satisfying operational environment conditions

FST-T normally operates in an environment with the following conditions:

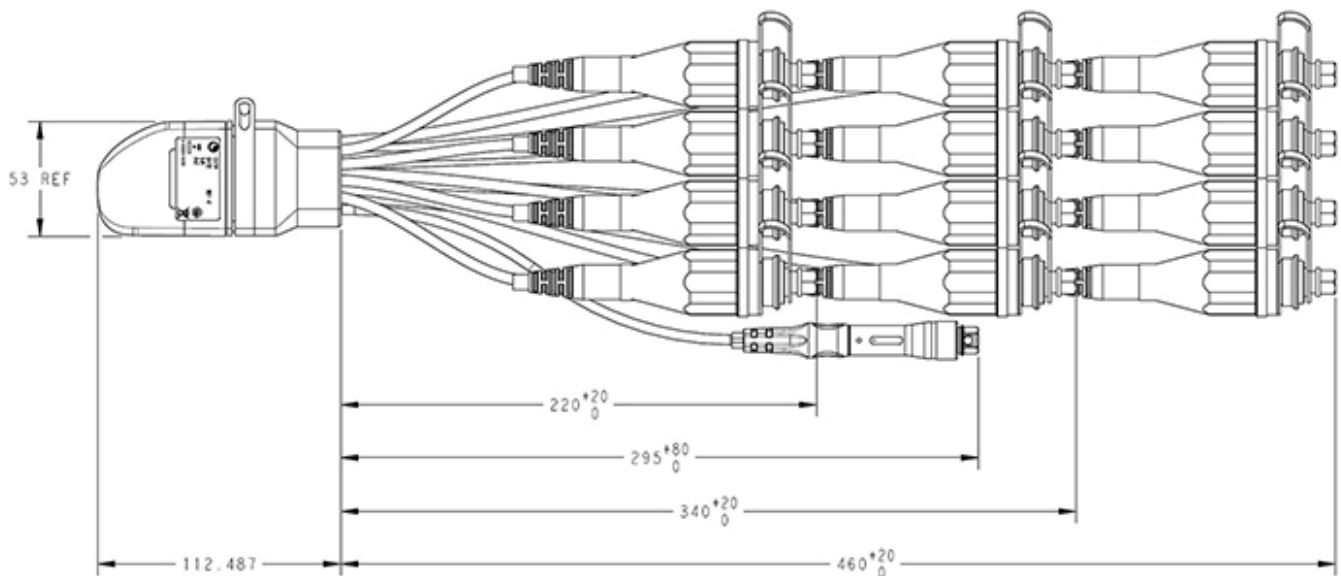Operating temperature: -40 - +70ºC

6.3.   Product Dimensions

Figure 6

6.4. HMFOC Plug Fiber Layout and Alignment to Drop Cable Ports

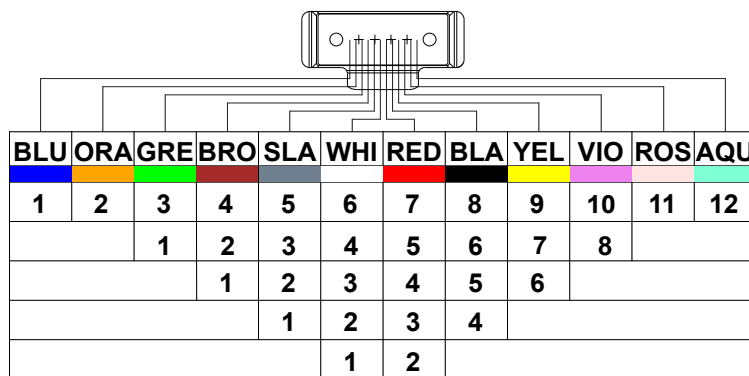| BLU	ORA	GRE	BRO	SLA	WHI	RED	BLA	YEL	VIO	ROS	AQU
1	2	3	4	5	6	7	8	9	10	11	12
		1	2	3	4	5	6	7	8		
			1	2	3	4	5	6			
				1	2	3	4				
					1	2					

Figure 7

6.5. Connecting Feeder Cable to FST-T HMFOC Cable

Remove the dust caps, inspect and clean the feeder cable connectors. Connect the feeder cable to the FST-T ensuring both key-ways line up. Finger tighten locking threads to secure.

Figure 8

6.6. Installing FST-T in Hand Hole / Pit

FST-T can be fixed to the side of a hand hole/pit using self-tapping screw (not included in kit).

Figure 9

Ensure FST-T is located in pit with feeder situated below the customer ports to allow easy installer access.

Figure 10

6.7.   Installing FST-T in Pedestal

FST-T can be fixed to a universal backplate or stake inside a pedestal using bolt, nut and washer provided in kit.

Figure 11

6.8.   Installing Drop Cable to FST

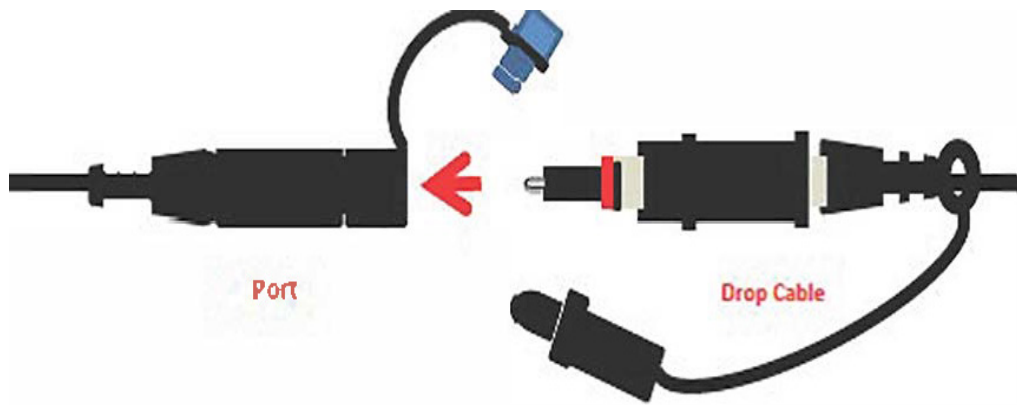Ensure you remove the dust caps, inspect and clean the cable connectors.

Figure 12

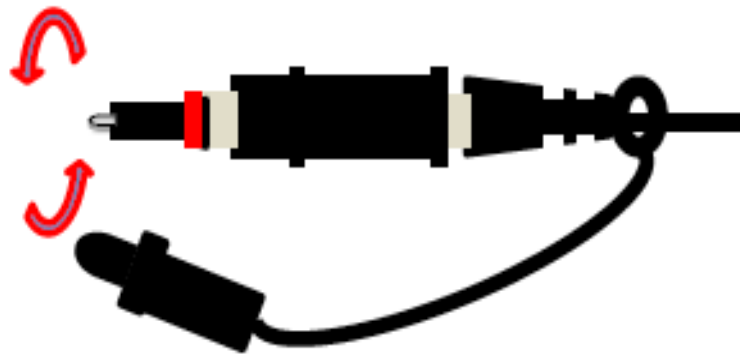Spin the drop cable inside the port until they mate correctly.

Figure 13

Correctly mated FST-T/Drop Cable

Figure 14

7.   Maintenance of FST-T Terminals

7.1.   Maintenance for the FST-T terminal is limited to cleaning the hardened adapters as needed to maintain optimal performance.

8.   Drop Cable Connector Cleaning Procedure

8.1.   Unscrew the drop cable connector dust cap from the end of the drop cable connector.

8.2.   Examine the end of the drop cable connector and determine which is the high side and which is the low side of the connector end-face as shown in Figure 14, View 1.
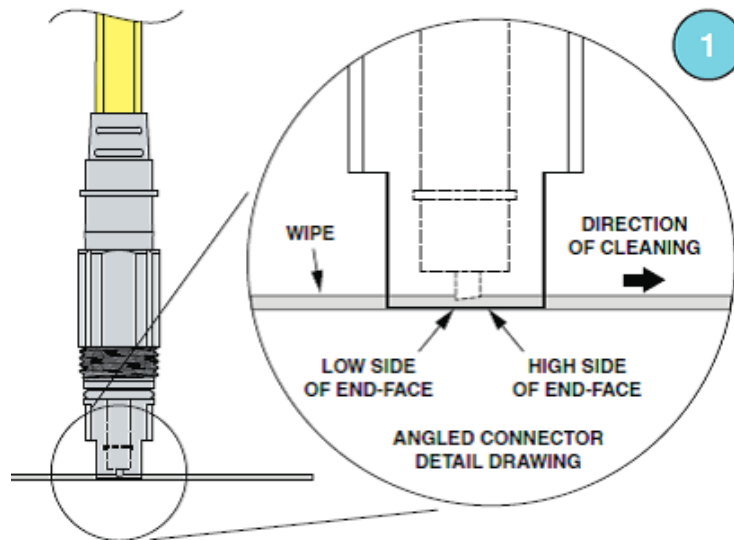

Figure 15

8.3.   Locate the cleaning tape cassette provided with the cleaning kit (Cleaning kit (FHD-ACC-CLNKIT1) sold separately.

8.4.   Open the tape shutter by squeezing the lever on the underside of the cassette and then keep the shutter open by continuing to squeeze the lever.

8.5.   Hold the end-face of the drop cable connector perpendicular to the cleaning tape and with the high side of the connector pointing in the direction of cleaning as shown in Figure 15, View 2.

Note: The drop cable connector uses angled SC type connectors. Make sure the high side of the connector end-face is pointing in the direction of the cleaning motion.
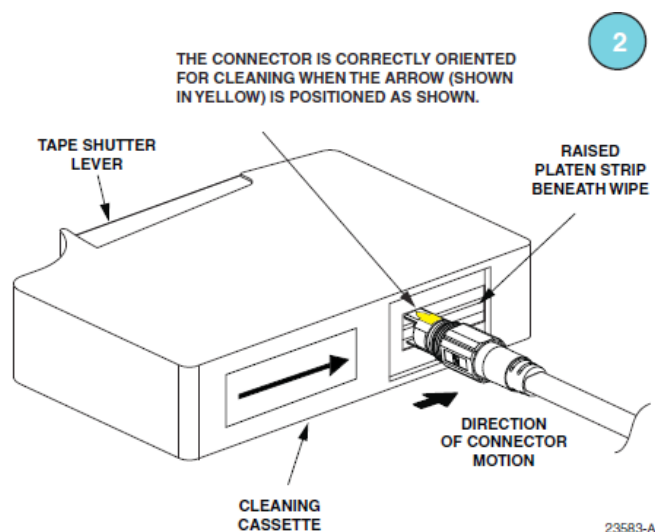

Figure 16

Note: Repeat cleaning procedure three times using a clean tape for each pass. Release and re-squeeze lever to advance the tape.

8.6.   With light pressure, slide the connector end-face once across the tape in the direction shown using a smooth linear motion. Do not press too hard and do not repeat the cleaning motion with the same tape.

8.7.   Release the lever on the underside of the cassette to close the tape shutter.

8.8.   Repeat steps 8.4 through 8.6 until the connector has been cleaned three times.

8.9.   When the connector is clean, reinstall the drop cable dust cap and tighten until finger tight.

9.   FST-T Adapter/Connector Cleaning Procedure

Cleaning kit (FHD-ACC-CLNKIT1) is required for this procedure. Use the following procedure to clean the FST-T optical port adapters.

9.1.   Using a 216B key tool, unthread the optical port dust cap from the optical port adapter.

9.2.   Locate the dry swabs that are provided with the connector/adapter cleaning kit.

9.3.   Insert a dry swab into the adapter as shown in Figure 17.

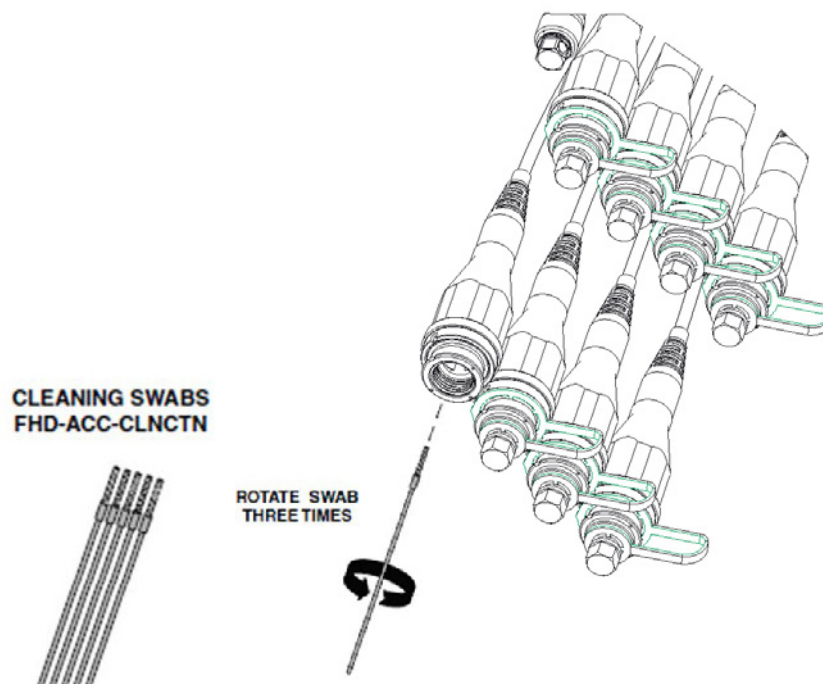**Note: Do not apply alcohol to the swab or the adapter.**

Figure 17

9.4.   While applying light pressure against the connector end-face, rotate the dry swab 360º three times as shown in Figure 18.

Figure 18

9.5.   Dispose of the dry swab after use.

9.6.   When the connector end-face and adapter ferrule are clean, connect the drop cable to the optical port or reinstall the optical port dust cap and tighten using the 216B key tool.

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