

Best Practice Bulletin – Cleaning MPO Connectors With Cassette Cleaners

Reasons for Cleaning MPO Connectors:

- The MPO connector: used in high density fiber applications; aggregate many fibers into a small footprint.
- Most common fiber counts: 12 and 24 fibers made up a fiber array of 12 fibers.
- Alignment of the fiber arrays is mission critical; dependent on having a clean, flat surface on the MT ferrule.

Common Sources For Endface Contamination On MPO Connectors: dust particles created by wear debris for the contact friction.

Five most common areas where contact friction creates wear debris:

1. Slider on the connector housing

The connector housing on the cable assembly has a slider on the housing that moves back and forth when the assembly is plugged into the adapter or transceiver.

2. Male MT being inserted into the female MT

MT based connectors rely on the guide pins of the male ferrule to be inserted into the guide pin holes on the female ferrule. Typically, the male MT ferrule is on the connector in the adapter.

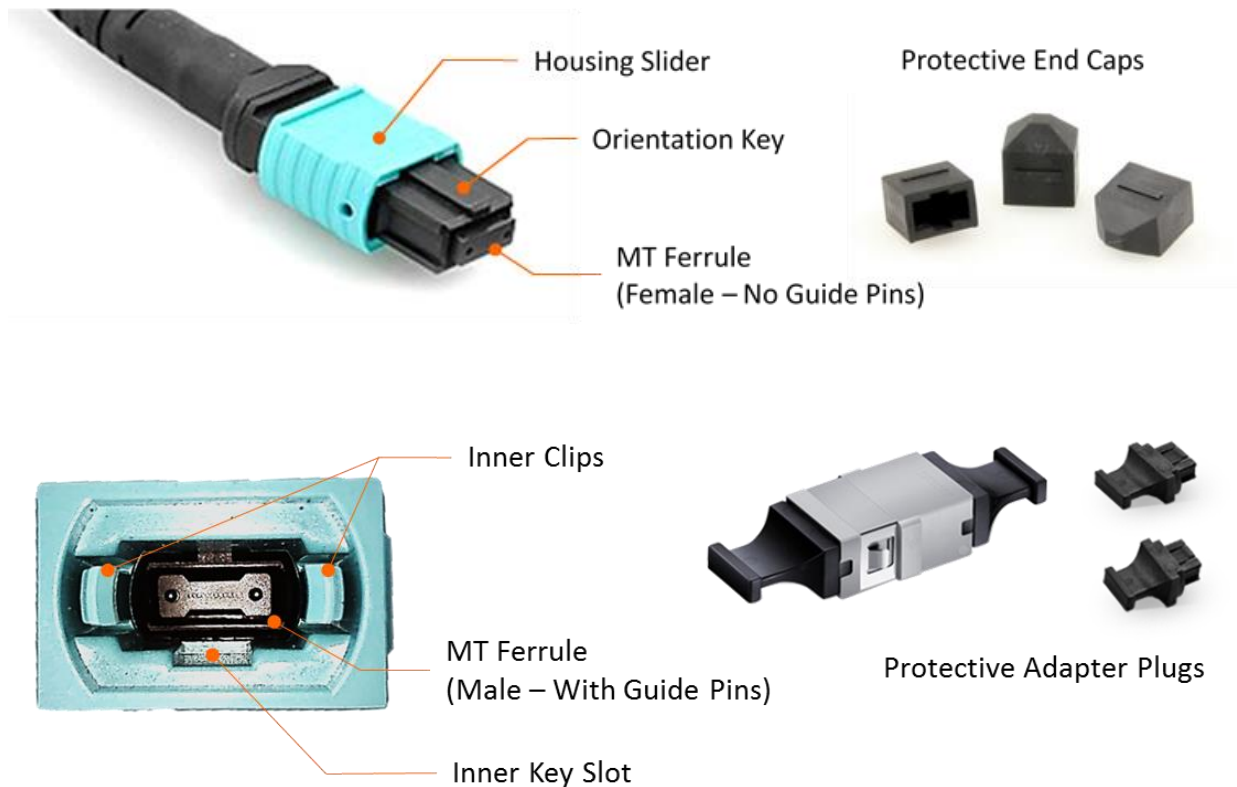
3. Inner clips inside the adapter

The adapter uses two inner clips to latch and secure the connector on the cable assembly.

4. Inner Key Slot

The MPO connector relies on an orientation key for managing the polarity of the connector. The orientation key on the connector slides into the inner key slot inside the adapter for polarity management with the inner MPO connector assembly.

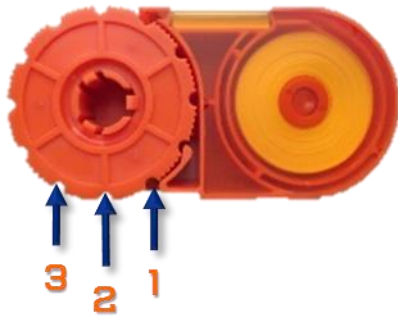
5. Protective end cap and protective adapter plug



How To Dry Clean An MPO Assembly:

1. Advance the wheel to 3 positions for a fresh section of the cleaning ribbon
2. Place MPO connector at the top of the cleaning window
3. Pull connector across the cleaning ribbon going in a single direction

ROTATE WHEEL 3 POSITIONS



How to Wet To Dry Clean An MPO Assembly:

1. Advance the wheel to 3 positions for a fresh section of the cleaning ribbon
2. Apply a small drop of the Sticklers cleaning fluid
3. Place MPO connector at the top of the cleaning window
4. Pull connector across the cleaning ribbon going in a single direction



SEE THE NEXT PAGE FOR DETAILS OF A CASSETTE CLEANER.

Parts Of A Cassette Cleaner

There are two versions of the cassette cleaners:

1. Standard Cassette Cleaner

The standard cassette cleaner has a flat cleaning window and would be used for female (no guide pin) MPO connectors.



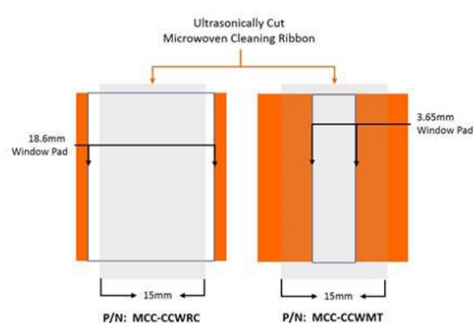
2. Male MT Cassette Cleaner

The cassettes made for the male cassettes have different backing in the cleaning window to accommodate the guide pins. The slotted backing is space so that the operator is making contact with the fiber array area as the connector is wiped.

STICKLERS P/N: CCWMT



CASSETTE CLEANCLICKER CLEANING WINDOW COMPARISON



MALE MPO CONNECTOR



- THE CASSETTE CLEANCLICKER MALE MT IS IDEAL FOR USE IN PRODUCTION FOR TERMINATING MT FERRULES
- THIS VERSION OF THE CASSETTE HAS A MODIFIED CLEANING WINDOW TO ACCOMMODATE FIBER ARRAY
- THE BACKING BEHIND THE RIBBON HAS BEEN ENGINEERED TO ACCOMMODATE THE MALE GUIDE PINS