SFQ Cassette Modification



Panduit Small Form factor QuickNet (SFQ) Cassettes have been modified to achieve uniformity across Panduit's cassette lines and to fully comply with the wiring sequences dictated in standards TIA-568-C.0 and TIA-598-C. Although cassettes are not identified or defined in the TIA-568-C.0 cabling standard, Panduit has decided to pursue this change to meet the special circumstances and needs of our customers. This wiring change ensures that Panduit Cassettes are fully interoperable with all products that fully comply with the Method A polarity guidelines.

As seen in Figure 1 below, the TIA-598-C color standard for a breakout cable that is MPO key down and LC key up dictates that Fiber 1 is blue, Fiber 2 is orange, etc. All odd fiber numbers are positioned in the A-side of the duplexing clip and all the even fiber numbers are positioned in the B-side of the duplexing clip.

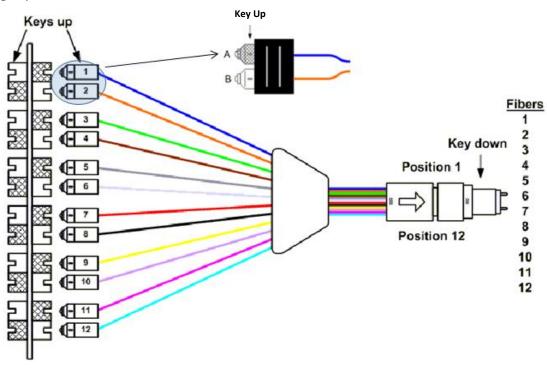


Figure 1. TIA-598-C standard for MPO Key Up to LC Key Down Breakout Cable Assembly

If the LC portion of this assembly was to be designed key down, fibers one and two would just switch positions so Fiber 1 is now orange, Fiber 2 is now blue, etc...Even with this key rotation, the assembly layout still dictates that the odd fiber numbers are positioned in the A-side of the duplexing clip and all the even fiber numbers are positioned in the B-Side of the duplexing clip as shown in Figure 2. The result of this alternative scheme shown in Figure 2 is a flip in the A-B duplexing.



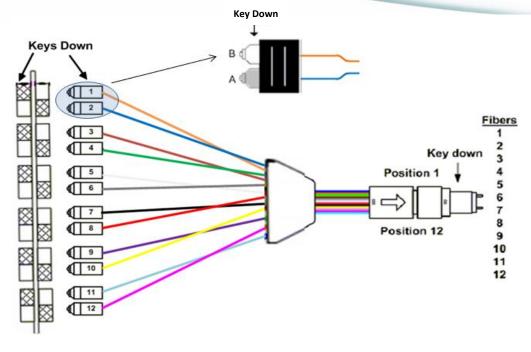


Figure 2. Alternative wiring for TIA-598-C Breakout Cable Assembly

Legacy Panduit SFQ cassettes had a fiber layout with LC key down as shown in Figure 2 but with the wiring of Figure 1. The wiring in the legacy SFQ cassettes is shown below in Figure 3 and has the odd fibers positioned in the B-side of the duplexing clip and the even fiber numbers positioned in the A-side of the duplexing clip.

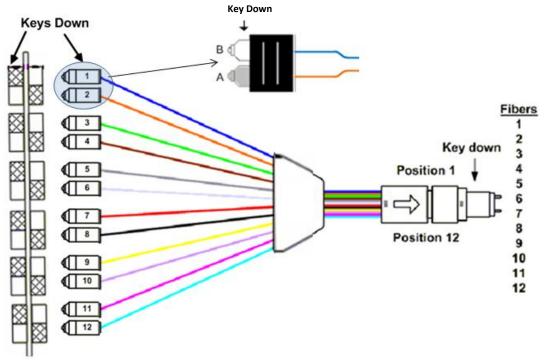


Figure 3. MPO Key Down to LC Key Down Wiring in Legacy SFQ Cassette Assembly



In most cases this causes no issues to an installation. However, for those instances where the legacy Panduit SFQ cassette connects to a fully compliant Method A product, a simple solution is to use a patch cord where the LC connectors are switched in the duplex clip.

To meet the ever increasing requirement of product interoperability, Panduit has modified the SFQ cassettes to reflect the wiring in Figure 2 so that the first channel, Fiber 1 (blue) starts on the A side of the duplex adapter, which in turn follows TIA-568-C.0 standard and is now compatible with all fully compliant Method A products on the market.

The SFQ cassette modifications are effective beginning 2013. Legacy cassettes have been obsoleted, and the table below shows the cross-references to the new replacement part numbers with the same wiring schemes.

Legacy SFQ Cassette Part Number	Replacement SFQ Cassette Part Number
FQ**-12-10	FQ**-12-10AF (Modified Method A; Pair Flipped)
FQ**-6-3	FQ**-06-03AF (Modified Method A; Pair Flipped)
FQ**-12-10B	FQ**-12-10AS (Method A)
FQ**-6-3B	FQ**-06-03AS (Method A)

Notes:

- 1) For legacy part numbers that do not end in "B", the cross-reference and new part numbers end in "AF"
- 2) For legacy part numbers ending in "B", the cross-reference and new part numbers end in "AS"
- 3) The asterisks (*) in the part numbers are wild cards for fiber type and loss performance

Please contact Customer Service at 800-777-3300 if you have general questions about fiber-optic cassettes or Panduit products. For technical support, please phone us at 866-405-6645.