OTDR Fiber Rings

Features

- Compact, rugged, lightweight
- 150, 500, and 1000 m lengths standard
- Available with a variety of connector styles
- Compact! Fits easily in OTDR cases or kits

Applications

- Use to test link loss with an OTDR
- For use as OTDR launch cable
- For use as OTDR receive cable
- Measure insertion loss and reflectance of near- and far-end connections

Fiber Rings are often a necessity when testing with an OTDR or Optical Troubleshooter. A launch cable, which connects the OTDR or Optical Troubleshooter to the link under test, reveals the insertion loss and reflectance of the near-end connection. A receive cable, which connects to the far-end of the link, reveals the insertion loss and reflectance of the far-end connection. Launch and receive test cables can range from 150 m to 1 km (or longer) in length. Because very long test cables are impractical to transport and use, AFL offers coiled lengths of 50 µm multimode, 62.5 µm multimode, or single-mode fiber packaged in compact rings.

Fiber Rings of 150 m of fiber are ideal for premises fiber network test applications. Fiber Rings of 500 m and 1 km of single-mode fiber are designed for broadband, long haul fiber network test applications.

Ordering Information

AFL NO. (New Numbers)	AFL NO. (Previously Used)	FIBER TYPE	FIBER LENGTH
FR-OM1-150-CC1-CC2	FR1-M6-150-x1-x2	Standard, Multimode, 62.5 µm, OM1	150 m (492 ft)
FR-OM2-150-CC1-CC2	FR1-M5-150-x1-x2	Standard, Multimode, 50 µm, OM2	150 m (492 ft)
FR-OM3-150-CC1-CC2	FR1-OM3-150-x1-x2	Laser Optimized, Multimode, 50 µm, OM3	150 m (492 ft)
FR-OM4-150-CC1-CC2	FR1-OM4-150-x1-x2	Laser Optimized, Multimode, 50 µm, OM4	150 m (492 ft)
FR-SMF-150-CC1-CC2	FR1-SM-150-y1-y2	Standard, Single-mode, G.652, SMF	150 m (492 ft)
FR-SMF-500-CC1-CC2	FR1-SM-500-y1-y2	Standard, Single-mode, G.652, SMF	500 m (1640 ft)
FR-SMF-1000-CC1-CC2	FR1-SM-1000-y1-y2	Standard, Single-mode, G.652, SMF	1000 m (3280 ft)
FR-BIF-150-CC1-CC2	FR1-BIF-150-y1-y2	Bend Insensitive, Single-mode, G.657.A2 BIF	150 m (492 ft)
FR-BIF-500-CC1-CC2	FR1-BIF-500-y1-y2	Bend Insensitive, Single-mode, G.657.A2 BIF	500 m (1640 ft)
FR-BIF-1000-CC1-CC2	FR1-BIF-1000-y1-y2	Bend Insensitive, Single-mode, G.657.A2 BIF	1000 m (3280 ft)

Fiber Rings Part Number Order Entry

AFL NO. = FR-FFF-LLLL-CC1-CC2 where:

FR = Fiber Ring (single fiber)
FFF = Fiber Type
- SMF= Single-mode (G.652)
- BIF = Bend Insensitive (G.657)
- CLF = Non-dispersion-shifted fiber (Corning LEAF®) (G.655)
- OM1 = 62.5 µm multimode
- OM2 = 50 µm multimode
- OM3 = 50 µm laser optimized
- OM4 = 50 µm laser optimized

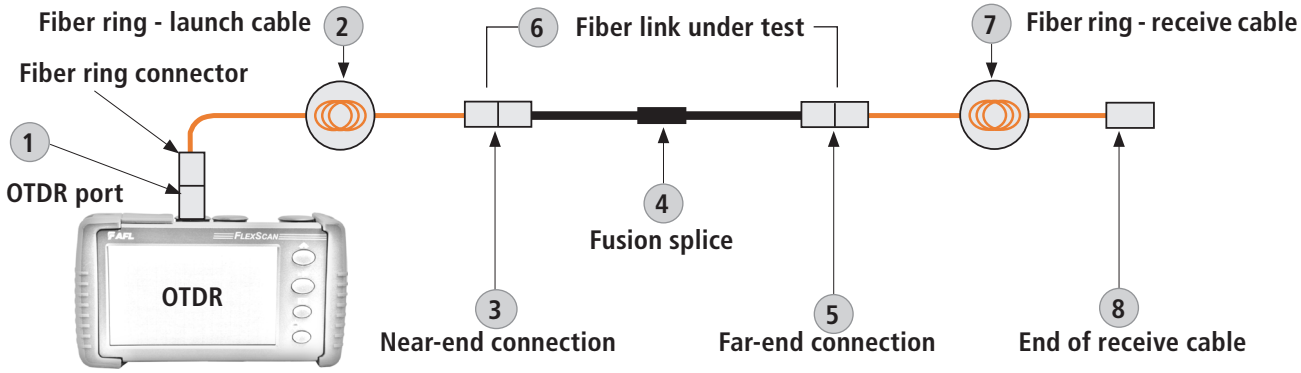
LLLL = Fiber Length (meters)
- 150 = 150 m (492 ft)
- 500 = 500 m (1640 ft)
- 1000 = 1000 m (3280 ft)

CC1 and **CC2** = End 1 and End 2 Connector Options
- Ayy = Angle-polished APC connectors (e.g. ASC, ALC, AFC, etc.)
- Uxx = Flat convex-polished UPC connectors (e.g. USC, ULC, UFC, UST, etc.)
- AE2 = E2000 APC
- UE2 = E2000 UPC
- OTA = OptiTap APC
- TRD = TRIDENT® APC

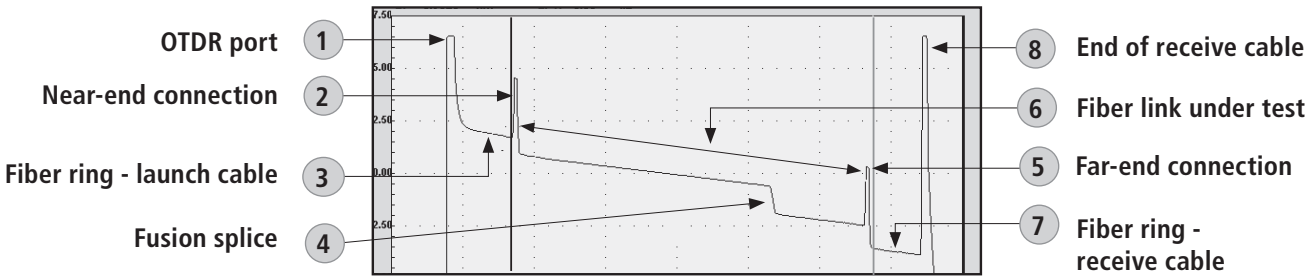
OTDR Fiber Rings

How to Generate a Baseline Trace Using Fiber Rings

- Use the Fiber Ring as a launch cable. Connect the Fiber Ring between your OTDR and the fiber link under test. This will allow you to measure the loss of the near-end connection.
- Use the Fiber Ring as a receive cable. Connect the Fiber Ring to the far-end connector of your fiber link under test. This will allow you to measure the loss of the far-end connection.
- By using Fiber Rings as both launch and receive cables, as shown in the diagram below, you can measure total insertion loss of the fiber link under test.



Example OTDR Test Configuration with Launch and Receive Cables



OTDR Trace Made using Launch and Receive Cables

Recommended Products

FS300

FS200

FlexScan® FS300 (quad) and FS200 (single-mode) OTDRs

- SmartAuto® 1-button automated testing for fast results
- LinkMap® color-coded icons for easy troubleshooting
- FleXpress® mode (FS200) completes OTDR test in <5 seconds!
- Integrated Source, Power Meter and VFL

TS100

FlexScan® TS100 FTTH PON Troubleshooter

- Locate faults in <3 seconds with the press of a button
- Displays link length, loss, ORL, and pass/fail results
- Single-ended test reduces time and cost
- Rugged, lightweight, hand-held for field use

Contact Sales@AFLglobal.com to schedule a demonstration or learn how to buy.

Visit www.AFLglobal.com/Test to learn more about Fiber Rings.

International Sales and Service Contact Information available at www.AFLglobal.com/Test/Contacts