FR1-M6-150-SC-ST

FR1-SM-1000-SC-ST

FR1-SM-150-SC-SC

OTDR Fibre Rings

Measuring an insertion loss of the near-end and/or far-end connection of a fibre optic link with an OTDR requires a launch and/or receive test cable. A launch cable, which connects the OTDR 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 fibre packaged in compact rings.

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

Fibre Ring Models

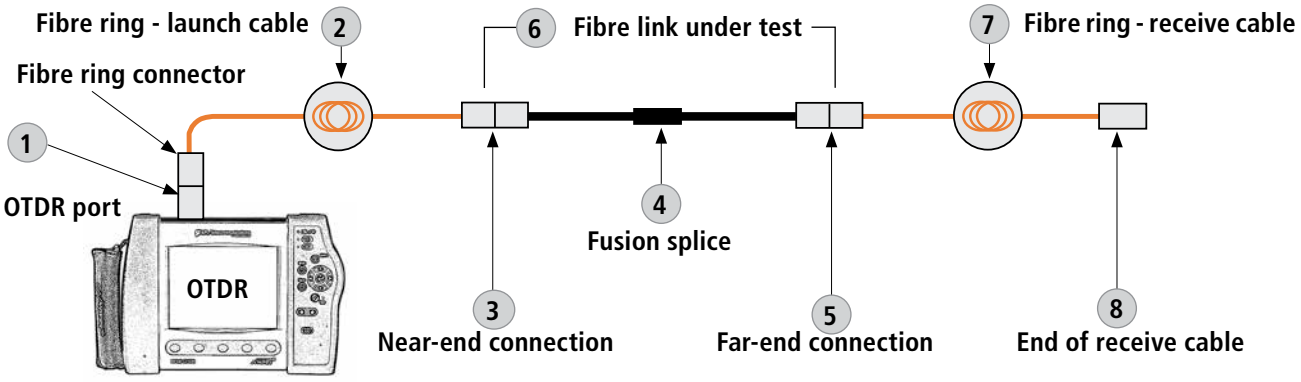
CONFIGURATION	FIBRE TYPE	FIBRE LENGTH	AFL NO.
Standard, one fibre	Multimode, 50 µm, OM2	150 m (492 ft)	FR1-M5-150- x1- x2
Standard, one fibre, Laser Optimised	Multimode, 50 µm, OM3	150 m (492 ft)	FR1-OM3-150-x1-x2
Standard, one fibre, Laser Optimised	Multimode, 50 µm, OM4	150 m (492 ft)	FR1-OM4-150-x1-x2
Standard, one fibre	Multimode, 62.5 µm	150 m (492 ft)	FR1-M6-150- x1- x2
Standard, one fibre	Single-mode	150 m (492 ft)	FR1-SM-150-y1-y2
Standard, one fibre	Single-mode	500 m (1640 ft)	FR1-SM-500-y1-y2
Standard, one fibre	Single-mode	1000 m (3280 ft)	FR1-SM-1000-y1-y2
Standard, one fibre, Bend Insensitive	Single-mode, G.657.A2 BIF	150 m (492 ft)	FR1-BIF-150-y1-y2
Standard, one fibre, Bend Insensitive	Single-mode, G.657.A2 BIF	500 m (1640 ft)	FR1-BIF-500-y1-y2
Standard, one fibre, Bend Insensitive	Single-mode, G.657.A2 BIF	1000 m (3280 ft)	FR1-BIF-1000-y1-y2

x1, x2 — connectors for multimode cables, specify type [ST, SC, ASC (angled SC), FC, AFC (angled FC), LC]
y1, y2 — connectors for single-mode cables, specify type [ST, SC, ASC (angled SC), FC, AFC (angled FC), LC]
Other connector types, fibre types, and fibre lengths will be quoted upon request.

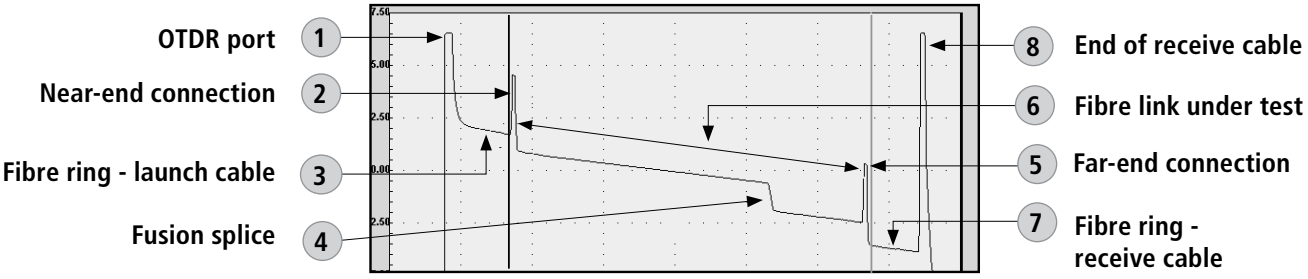
Contractor Series Light Sources and Power Meters

How to Generate a Baseline Trace Using Fibre Rings

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



Example OTDR Test Configuration with Launch and Receive Cables



OTDR Trace Made using Launch and Receive Cables