

Components

5800 Series Multimode Reference Cables

Features

- Off-the-shelf reference cables for all RIFOCS return loss meters
- Tighter tolerances for maximum measurement accuracy
- Low insertion loss
- High return loss
- Broad range of terminations available, including FC, SC, ST, DIN, and E2000
- Precision PC and APC (8° angle-polished) endface profiles conform to TELCORDIA GR-326 requirements
- Labeled with unique serial number and measured insertion loss values
- Shipped with Certificate of Compliance and endface geometry plot
- Economical and efficient CORE reference cable exchange/replacement program is ideal for manufacturers



Specifications

Insertion loss:	
Reference end	≤ 0.15dB
Instrument end	≤ 0.25dB
Return loss:	
Reference end, PC	≥ 40dB
Instrument end	≥ 45dB
Connector profile (per GR-326):	
Radius of curvature	7mm to 25mm
Apex offset	≤ 50µm
Length	3 meters
Launch condition:	
50/125µm	Per TIA-568B.3
62.5/125µm	Per TIA-568B.3
100/140µm	Per SAE ARP5061 (draft)

Applications

General Fiber Optic Testing

RIFOCS 5800 Series multimode reference cables are manufactured to tighter tolerances and higher standards than regular fiber optic cables. All reference cables manufactured by RIFOCS must conform to stringent insertion loss (0.15dB, max.), return loss (40dB, min.), and endface specifications. RIFOCS reference cables are also accompanied by a Certificate of Compliance and a plot of the endface geometry. In addition, all reference cables manufactured by RIFOCS are labeled with a unique serial number and the insertion loss values obtained during quality assurance testing.

To ensure maximum accuracy, high quality reference cables are essential when performing measurements using the 680MRL Series, and 780RL Series multimode return loss meters. All 5800 Series multimode reference cables are available with 50/125µm, 62.5/125µm, or 100/140µm graded-index fiber.

All standard reference cables are terminated with a FC-APC connector on one end for a direct connection to the optical interface of RIFOCS return loss meters. The termination of the other end is specified using the product codes listed in the **Ordering Information** table on the back of this sheet. Custom reference cables manufactured to customer specifications are also available. Contact RIFOCS Corp. for more information.

Ordering Information

5800 Series MM Reference Cables

Product Code	Description
58-MTRJ-106	MT-RJ, PC, 62.5/125µm
5826-105	FC-PC, DIAMOND, 50/125µm
5826-106	FC-PC, DIAMOND, 62.5/125µm
5826-110	FC-PC, DIAMOND, 100/140µm
582K-105	FC-PC, ceramic, 50/125µm
582K-106	FC-PC, ceramic, 62.5/125µm
582K-110	FC-PC, ceramic, 100/140µm
5836-105	ST-PC, DIAMOND, 50/125µm
5836-106	ST-PC, DIAMOND, 62.5/125µm
5836-110	ST-PC, DIAMOND, 100/140µm
583K-105	ST-PC, ceramic, 50/125µm
583K-106*	ST-PC, ceramic, 62.5/125µm
583K-110	ST-PC, ceramic, 100/140µm
5866-105	SC-PC, DIAMOND, 50/125µm
5866-106	SC-PC, DIAMOND, 62.5/125µm
5866-110	SC-PC, DIAMOND, 100/140µm
586K-105	SC-PC, ceramic, 50/125µm
586K-106*	SC-PC, ceramic, 62.5/125µm
586K-110	SC-PC, ceramic, 100/140µm
58E2-105	E-2000-PC, DIAMOND, 50/125µm
58E2-106	E-2000-PC, DIAMOND, 62.5/125µm
58E2-110	E-2000-PC, DIAMOND, 100/140µm

* Stock configuration.

CORE Reference Cable Exchange Program

The CORE (Cable Optical Reference Exchange) program gives RIFOCS reference cable users the ability to receive recertified reference cables quickly and economically.

Instead of sending in a reference cable for recertification, which can be time consuming and costly if the cable cannot be recertified, RIFOCS will exchange a customer's cable with a recertified cable of the same type.

Reference cables have a limited life, since fiber optic connectors can only be repolished a finite number of times before the ferrule becomes too short to be used. With the CORE program, replacement of worn-out or damaged reference cables is no longer a problem.

To take advantage of the CORE program, follow the instructions below:

- 1) Obtain an RMA number by calling RIFOCS at (805) 389-9800 and asking for the CORE representative, or e-mail the CORE representative at coreprogram@rifocs.com. In either case, note the model numbers appearing on the ID label of each cable and quantity of reference cables being returned for CORE exchange.
- 2) Ship the cables, freight prepaid, with a purchase order allowing for **NET 30 DAYS** subject to approved credit, or a credit card payment. If paying by credit card, include the card type, e.g., MasterCard, Visa, American Express, etc., the account number, expiration date, and the authorized name on the card. Note the RMA number on front of the package and on the purchase order. Note the preferred return shipping method and account number if required (otherwise FOB CAMARILLO).

Reference Cable Care and Cleaning

Reference cables are delicate pieces of test equipment, but can last a long time if properly cared for.

To ensure maximum reference cable life, all fiber optic connectors must be cleaned every time they are mated. Failing to clean a fiber optic connector can destroy it the first time it is mated, while a properly cared for connector will last for more than 500 matings. The figure at right depicts connector end-faces before and after cleaning.

A RIFOCS 945 All-In-One cleaning tool is a quick, convenient method for ensuring proper connector care. The 945 All-In-One cleaning tool contains a special cloth tape that removes endface contaminants without additional consumables, such as alcohol.

Another way to clean a fiber optic connector is to wipe it with a lint-free non-abrasive paper tissue, such as Texwipe TX404, using a new spot on the tissue each time the endface is touched. If the connector is extremely dirty, moisten the tissue with reagent-grade isopropyl alcohol before cleaning. Make sure all residual alcohol has evaporated before mating the connector.

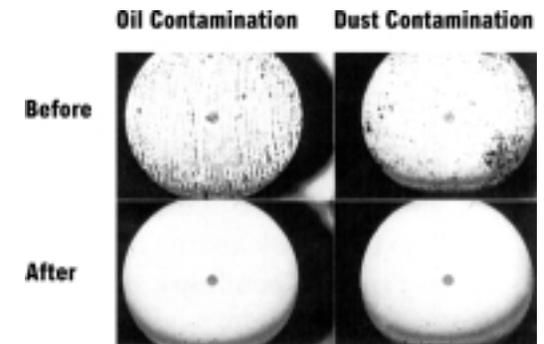
The correct part number for each CORE replacement cable is CORE-XXXX; XXXX is the original reference cable part number. For example, a previously purchased 5926 is exchanged with a CORE-5926. The cost for each CORE replacement cable is a flat charge of \$75 per cable (subject to change without notice).

3) Replacement/recertified CORE reference cables will be shipped from RIFOCS within 48 hours (24 hours for stock configurations, indicated by asterisks in the **Ordering Information** table, at left).

As both a manufacturer of test equipment and precision cable assemblies, RIFOCS understands the special needs of manufacturers requiring quick, efficient response and replacements. We understand that connectors are often subject to misuse, mishandling, and lack of proper maintenance, i.e., cleaning, and have designed this program with production houses in mind.

For questions or comments regarding the CORE reference cable replacement program, please contact the CORE representative by phone or e-mail. We will respond within 24 hours.

NOTE: RIFOCS reference cables are serialized to facilitate organization and tracking by ISO9000-based quality systems. CORE replacement cables will always have a different serial number than the original cable. If the reference cables are being tracked (a good quality assurance practice), all records should be updated upon receipt of the CORE replacement cables.



When mating fiber optic connectors together, make sure that nothing touches or scratches the endfaces. To do so, rock the connector into the adapter by first touching the side of the connector to the adapter.

