

FC CONNECTORS



- Very precise connectors
- Ceramic ferrule
- Singlemode or multimode.

INTRODUCTION

This connector has a high precision ceramic ferrule in a cylindrical body. Its spring-loaded free-floating ferrule and a screw-on mechanism with a precision anti-rotation key, ensure repeatable alignment with high performance physical contact, and reduce endface damage. Suitable for both singlemode and multimode fibers in communication applications and instrumentation.

Available with

- pre-polished PC or APC ceramic ferrule.
- for 125 μ m, 140 μ m or 230 μ m fibers
- 900 μ m or 3mm boot for buffered fiber or cable.

Special versions are optimized for specific applications (see other pages) :

- Polarization maintaining FC
- "NASA" FC approved for harsh environments

MAIN SPECIFICATIONS

Insertion loss (typ)	0,15 dB
Return loss (PC)	< -45 dB
Return loss (APC)	Typ.< -55 dB
Temperature range	-40°C +85°C
Cycles	> 500
Key	2,02 mm "Wide key" version 2,14mm on request

References	Fibers	Internal diameter (μ m)
C1FC125JH03	Singlemode PC	126
C1FC125JH02	Singlemode APC	126
2553-2	GI 125	127
C1FC127JH04	GI 140	144
C1FC230JH02	HCS200	231
Adaptors		Sleeve
C1FC-RAC-JH03	Singlemode/multimode	zirconium
C1FC-RAC-JH04	Singlemode APC	zirconium
C1FC-RAC-JH05	Multimode	metal

CONNECTORS FOR POLARIZATION MAINTENING FIBERS

Standard single-mode connectors provide good characteristics in insertion and return loss. However, because the polarization characteristics of PM fibers are caused by stress, they are very sensitive to external stress. External stress can change the rotational orientation of the optical axis and decrease extinction ratio. Connectors for this type of fiber must provide a perfect rotationally aligned interface between the PM fibers without additional stress.

The PM connector performances must be better in :

- High quality materials, tight tolerances connector / adapter key.
- No internal sources of rotational looseness.
- Tunable system to adjust alignment of optical axis / key connector.

Warning: stress can be induced during connectorization process, polishing, epoxy curing, bending and cabling...Dont hesitate to contact us to have complete patchcord or pigtail on simplex cables or with 900 μ m tight buffer.