

FC Connectors & Adaptors

The FC Connector is used extensively in the telecommunications market, where long singlemode optical fibre cables can run upwards of 50km. In these extreme situations the connector needs to have extremely low loss and accurate geometry.

The FC Optical Fibre Connector comprises of a nickel plated brass body and a ceramic ferrule/spring/crimp barrel assembly plus a crimp over sleeve and rubber boot. These connectors are suitable for 900µm and 3mm cables. The connector is precision made and manufactured to demanding specifications. The combination of a ceramic ferrule and a precision nickel plated brass housing provides

consistent long-term mechanical and optical performance.

Connectors are available in singlemode options. One piece design features pre-radiused ceramic ferrules. Suitable for use with two part heat curing epoxies and cold cure anaerobic adhesives. Generally there are two types of alignment sleeve within an adaptor; phosphor bronze for multimode or zirconia (ceramic) for singlemode. The FC connector and adaptor set are mainly used for singlemode applications where precision is required. With its simple to use locking thread mechanism preventing accidental disconnection, this provides a very secure connection.

Features & Benefits

- Low insertion loss and return loss
- High precision alignment
- Telcordia, ANSI, TIA, NTT and JIS compliance
- NTT-FC Compatibility
- Choice of housing material and sleeve material
- Nickel plated brass body



Product Specifications		
Versions Available	3.0mm patch, 900µm	
Termination Procedures	Epoxy-crimp-polish	
Standard Packaging	100pcs bulk packed	
Singlemode	Insertion Loss	Max. 0.3dB, Typical 0.2dB
	Return Loss	UPC > -50dB, Typical > -55dB APC > -60dB, Typical > -65dB
Capillary Diameter Tolerance	126 ± 0.5µm	
Ferrule Diameter	2.5mm ± .001 Pre-radiused, PC-end finish for PC ferrule to ferrule. R 10 to 25mm	
Vibration (Mated Pair)	10-55 Hz, 1.5mm P to P = 0.3dB change (IEC 61300-2-1)	
Mating Durability	1000 mating cycles - clean every 25 <0.2dB change (IEC 61300-2-2)	
High Temperature	75°C for 96 hours = 0.2dB change (IEC 61300-2-18)	
Damp Heat	60°C at 95% RH, 96 hours = 0.2dB change (IEC 61300-2-19)	
Temperature Cycling	-40 to +75°C, 40 cycles = 0.2dB change (IEC 61300-2-48)	
Operating Temperature	-40°C to +85°C	
Durability	<0.20dB typical change 1000 matings	

Ordering Information	
Product Description	Part Number
FC/APC SX Plug SM 900µm Green Boot	FFFC6
FC/PC SX Plug SM 3mm Blue Boot	FFFC3BL
FC/APC SX Plug SM 3mm Green Boot	FFFC5
FC SX SM Adaptor - Red Caps	FFFC1