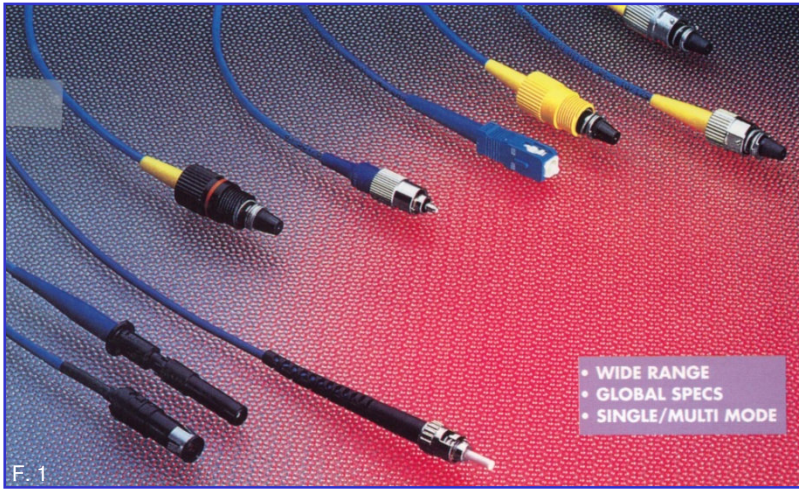


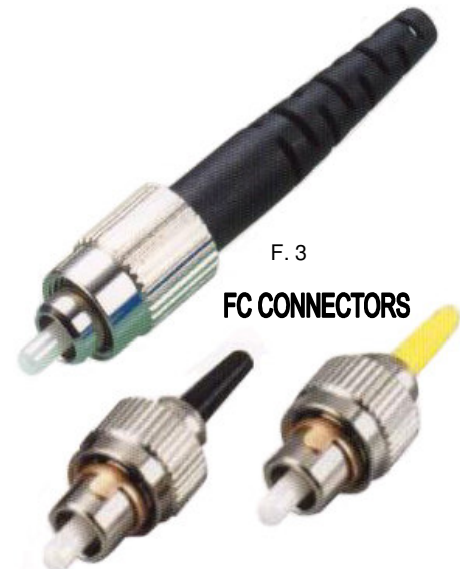
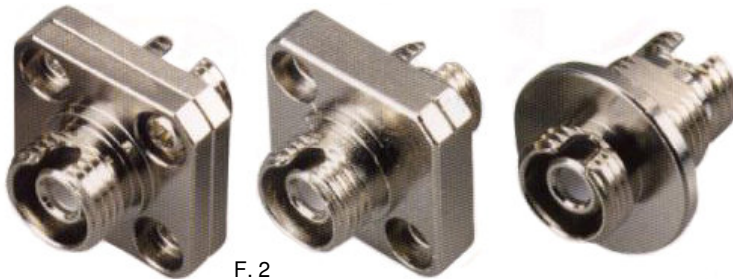
Fibre Connection Products



PRODUCT RANGE

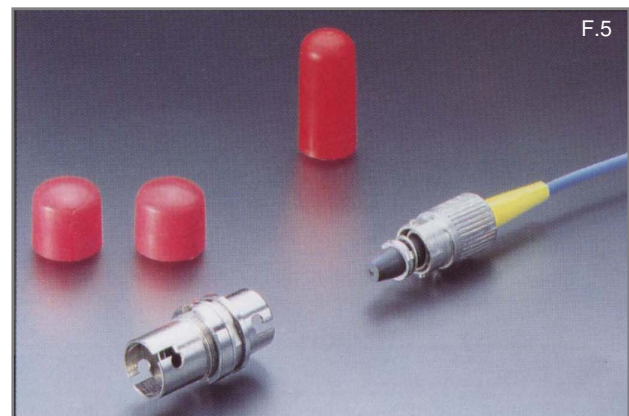
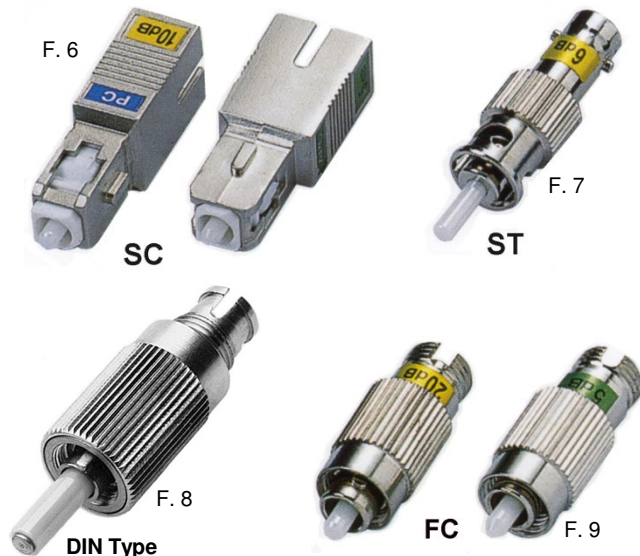
- SC Connectors, Patchcords & Pigtails
- SC/APC Connectors, Patchcords & Pigtails
- FC Connectors, Patchcords & Pigtails
- FC/APC Connectors, Patchcords & Pigtails
- ST Connectors, Patchcords & Pigtails
- DIN Connectors, Patchcords & Pigtails
- Adaptors – SC, SC/APC, FC, FC/APC, ST, DIN, DIN-SC, DIN-FC, DIN-FC/APC
- Attenuators – Fixed & Variable (1-30dB)
- Couplers

ADAPTORS



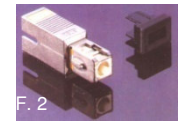
ATTENUATORS

The Attenuators are composed of a male and a female section, which are fully compatible with the related standards.



All connectors are manufactured to meet the highest quality standards required within transmission & distribution networks, measurement instruments & local area networks. Connectors may be supplied for single & multimode applications.

Fibre Products



•ESCON™ is a registered trademark of IBM
ST, LGX (LC)™ are trademarks of Lucent Technologies

Connectors

- a. FC / APC Connectors – single mode
- b. FC Connectors – single / multi-mode
- c. LC* Connectors – single / multi-mode
- d. MT-RJ Connectors – multi mode only
- e. MU Connectors
- f. SC / APC Connectors – single-mode
- g. SC Connectors – single / multi-mode
- h. SC Duplex Connectors – single / multi-mode
- i. ST* Connectors – single / multi-mode
- j. DIN Connectors – single mode

Patch Cords

- a. FC / APC Patch cords – single mode
- b. FC Patch cords – single / multi-mode
- c. LC* Patch cords – single / multi-mode
- d. MU Patch cords – single / multi-mode
- e. SC / APC Patch cords – single / multi-mode
- f. SC Patch cords – single / multi-mode
- g. ST* Patch cords – single / multi-mode
- h. DIN Patch cords – single / multi-mode

Pigtails

- a. FC / APC Pigtails – single mode
- b. FC Pigtails – single / multi-mode
- c. LC* Pigtails – single / multi-mode
- d. SC / APC Pigtails – single mode
- e. SC Pigtails – single / multi-mode
- f. ST* Pigtails – single / multi-mode

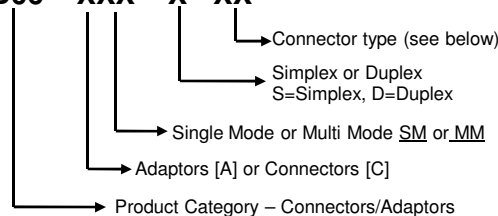
Adaptors

- a. FC / APC through Adaptors – single mode
- b. FC through Adaptors – single / multi-mode
- c. LC* through Adaptors – single / multi-mode
- d. MT-RJ Adaptors – multi-mode only
- e. MU Adaptors
- f. SC / APC through Adaptors- single mode
- g. SC Duplex Adaptors – single / multi-mode
- h. SC through Adaptors – single / multi-mode
- i. ST* through Adaptors – single / multi-mode

Ordering Information

Group D-06**

PX – D06 – XXX – X - XX



Connector Type (replace XX with the below)

SC	ST	SCA
MU	FC	MT-RJ
FCA	DIN (LSA)	LC
E2000		

Unassembled Components

SC Connectors & Adaptors – Single mode/Multi Mode

Features

- Meets EIA/TIA, IEC and NTT-SC standards
- Variety of color & boot styles, variety of PC length
- Pre-assemblies or multi-piece body design
 - Reduce termination time
- Pre-polished ceramic ferrules
 - Minimizes polishing time
 - Maintains end face geometry, physical contact
 - Tunable
- Low insertion loss
 - < 0.20dB typ. Multi-mode enhanced
 - < 0.15dB typ. Single mode
- Three adaptor styles
- Industry standard, small flanged & shuttered
- High tolerance 125µm, 126µm

Applications

Telecommunications networks
CATV networks
Data communication networks
Active device termination

Components Specifications

FC, SC, LC(1.25 Diameter), ST, DIN, A/FC, A/SC

Features

Boot types

- Various colours (black, blue, yellow, green,...)
- 900µm boots, 2.0mm boots, 3.0mm boots

Specifications

Ferrule: Zirconia pre-polished

Single mode	Ultra	APC
Diameter	2.499	2.499
Inside Diameter	125, 126µm	125, 126µm
Concentricity	<1µm	<1µm
Operational temperature	-40 to + 80°C	-40 to + 80°C
Storage temperature	-40 to + 80°C	-40 to + 80°C

SC / APC Connectors and Adaptors

Features

- Connector design: NTT-SC standard
- One-piece body design: Minimizes termination time
Field installable
- Precision APC ferrule: Provides superior performance
Insertion loss <0.25dB typ.
Return loss >60dB typ.
- Standard SC adaptors
- NTT-SC standard
- Zirconia ceramic and phosphor bronze sleeve
- Shuttered adaptors: Shield against exposure to laser radiation
- Dust cover for unused fibre channels

Fibre Product (Cont'd)

Fibre Optic Product (Assemblies)

Patchcords, Pigtails, Multi Fibre Assemblies FC, SC, LC, ST, DIN, A/FC, A/SC

SC Duplex Connectors (PC) & Adaptors

Features

- Utilizes standard NTT-ST* Connectors
- Meets EIA/TIA 568A and IEC 874-19 standards
- Easy to assemble one-piece SC Connector body
- Low insertion loss: < 0.15dB typ. Single mode
< 0.20dB typ. Multi mode enhanced.
- Rugged duplex housing provides uniform and smooth mating
- Optional adaptor styles SC to SC and SC to ST*
Snap mount or flange mount

Applications

Telecommunication networks
Data communication networks
Fibre Channel

FC, SC & LC Connectors (PC) & Adaptors

Features

- High performance single mode & multi-mode pre-polished ferrules
- ST compatible bayonet coupling
- Field installable
- Standard crimp & crimp less screw type Kevlar* retention
- Variety of ferrule styles PC, PC+ & stainless steel
- Low insertion loss:-
< 0.20dB typ. Multi mode enhanced
< 0.35dB typ. Multi mode stainless steel
- Variety of connector styles – long boot, short boot, 90° boot & 900 µm buffered fibre.

Single mode

Return loss	≥ -50dB
Insertion loss	≤ 0.15dB typical
Operational temperature	- 40°C to + 80°C
Storage temperature	- 40°C to + 80°C

Applications

Telecom
Local Area Networks (LAN)
Data Processing Networks
Premise installations
Instrumentation

SC, LC, FC, DIN, A/SC, A/FC Component (Unassembled)

Features

- Designed to NTT-FC standard
- One-piece body design
 - Reduces termination time
 - Field installable – essentially pre-assembled
- Pre-polished ceramic ferrules
 - Minimum polishing needed
 - Maintains end face geometry, physical contact
- Low insertion loss
< 0.20dB typ. Multi-mode enhanced
< 0.15dB typ. Single-mode

Applications

Telecommunication networks
CATV networks
Active device termination
Instrumentation

SC/FC/APC Connectors & Adaptors (Components)

Features

- NTT-FC connector design
- One-piece body design for quick & easy assembly
- Precision APC ferrule provides superior performance
- Low insertion loss < 0.25dB typ. Single mode
- Low return loss > 60dB
- Compatible with all APC hardware
- Standard NTT-FC key
- Tight fit key (compatible with other manufacturers)

Specifications

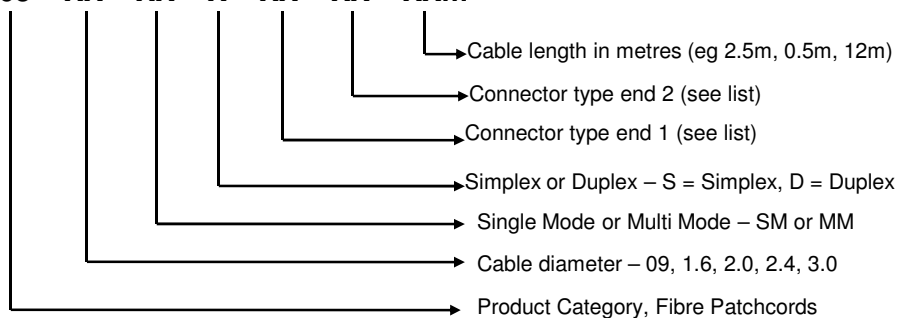
Ferrule: Zirconia pre-polished

Single mode	Ultra	APC
Return Loss	> 50dB	> 60dB
Insertion Loss	≤ 0.15dB	≤ 0.25dB
Operational temperature	- 40°C to + 80°C	- 40°C to + 80°C
Storage temperature	- 40°C to + 80°C	- 40°C to + 80°C

Ordering Information

Group D-05*

PX – D05 – XX – XX – X – XX – XX – XXm



Connector Type

(replace XX with the below)

SC
ST
SCA
MU
FC
MT-RJ
FCA
DIN (LSA)
LC
E2000

Fibre Product (Cont'd)

FC and SC Optical Attenuators

Attenuators are situated in proximity to the receiving end of fibre optical transmission systems on measurement instruments and for laboratory use on measuring benches. At Series Attenuators are available in SC, FC and SC2 configurations. Attenuation values can be supplied between 1 and 30dB for use within 1300 to 1550nm wavelengths. The Attenuators are composed of a male and a female section, which are fully compatible with the related standards.

SC Attenuators

- Push-Pull blocking system
- Body: Tin-Zinc alloy (SC)
- Zirconia Ferrule
- PC/APC versions available
- +16dBm input power

FC Attenuators

- Screw blocking system
- Body: Nickel Coated Brass
- Zirconia Ferrule
- PC/APC versions available
- +16dBm input power

Adaptor Plug in type SC, Male PC – Female APC

Application

- ADSL terminal
- PC – APC conversion adaptor

Fibre Couplers and Multiplexers

Wavelength Division Multiplexers

Features

- Low insertion loss
- Low polarization sensitivity
- Different fibre types available

Applications

- Bidirectional communications (VOD)
- Optical fibre amplifiers (EDFA)
- CATV
- WDM systems

Advantages

- High isolation
- Accurate centre wavelength

Single Mode Optical Fibre Couplers

Features

- Singlemode, multimode, dual window & wideband option
- Low insertion loss and back reflection
- Excellent environment stability
- Long term reliability

Applications

- Telecommunications
- Fibre optic sensors
- LANs
- CATV
- Fibre In The Loop (FITL)
- Video transmission
- Network testing

Specifications:

(Standard Coupler Singlemode Dual Window Wideband)

Operating wavelength	1310 ± 40nm and 1550 ± 40nm	
Performance level	Super	High
Uniformity (50 : 50)	≤ 0.80dB	≤ 1.2dB
Thermal stability	≤ 0.10dB	≤ 0.10dB
Polarization stability	≤ 0.15dB	≤ 0.20dB
Max. insertion loss (dB)	50/50	3.6
	40/60	4.7 / 2.7
	30/70	6.0 / 1.9
	20/80	7.9 / 1.2
	10/90	11.3 / 0.6
	3/97	18.4 / 0.3
Directivity	≤ -50dB (1 x2) ≤ -60dB (2x2)	
Back reflection	≤ -55dB	
Operating temperature	-40°C ~ + 75°C	

