

# FIBRE CONNECTOR

## FIBRE CONNECTOR SPECIFICATION

### FEATURES

Quick, easy installation.  
 High quality Zirconia PC ferrule.  
 900 micron, 2mm, 3mm cable applications.  
 Telcordia-style strain and relief boot.

### STANDARDS COMPLIANCE

UL-V0 flammability rating  
 TIA/EIA-568-C.3 (Optical Fibre Cabling Components Standard)  
 ANSI/TIA/EIA-455B (Standard Test Procedure for Standard Fibre Optic Fibres, Cables, Connecting & Terminating Devices)  
 IPC-8497-1 (Cleaning Methods & Contamination Assessment for Optical Assembly)

### DESIGN & MATERIALS

Connector Ferrule	Zirconia Ceramic
Alignment Sleeve	Zirconia or Phosphor Bronze
Connector Body	UL 94V-0 rated Thermoplastic
Crimp Insert/Crimp Tube	Nickel-Plated Brass/Thermoplastic Elastomer Polymer
Dust Cap	Nylon or PVC
Strain Relief Boot	Flame retardant (UL-Rated 94-V0) polymer
Connector Style	SC, FC, ST, LC, MTRJ, E2000
Polish	PC & APC
Capillary Diameter Tolerance(Single Mode)	126 ± 0.5 µm
Capillary Diameter Tolerance(Multimode)	127 ± 0.5 µm
Ferrule Diameter	2.5 ± 0.001 mm

### ENVIRONMENTAL & MECHANICAL DATA

Operating Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
Temperature Cycling (61300-2-18)	-40 °C to +75 °C, 40 cycles=0.2 dB change
High Temperature (61300-2-18)	70° c for 96 Hrs, <0.4dB change
Damp Heat(61300-2-19)	40° C at 93 % RH for 96 Hrs, <0.4 dB change
Vibration-Mated Pair (61300-2-1)	10-55 Hz, 1.5 mm P to P < 0.2 dB change
Mating Durability (61300-2-2)	500 Mating Cycles, clean every 25, < 0.2 dB change

### OPTICAL PERFORMANCE DATA

Item	Single mode			Multimode		
	PC	UPC	APC	62.5/125	50/125	50/125 10G
Insert Loss/connector (single Fibre)	0.2 dB Max. (0.15 dB typ.)			0.3dB Max. (0.25dB typ.)		
Return Loss	45 dB	≥50 dB	≥60 dB	N.A		
Insert Loss/MTRJ Connector	0.5 dB Max. (0.45 dB typ.)			0.5dB max. (0.45dB typ.)		
Pull Strength	≥98 N	≥98 N	≥98 N	≥98 N		

# FIBRE CONNECTOR

## FC CONNECTOR

Norden FC connector is comprised of a Nickel plated Brass body and a Ceramic ferrule/spring/crimp barrel assembly plus a crimp over sleeve and rubber boot. This connector has a screw thread fitting into the adaptor to provide a secure connection and is suitable for 900µm, 2-3mm cable. The connector is precision made and manufactured to demanding specifications. The combination of a Ceramic ferrule with precision Nickel plated Brass housing provides consistent long-term mechanical and optical performance. The FC connector is available in singlemode multimode in UPC and APC versions.



## COMPLIANCE

IEC 61754-13 (Intermateability) & CECC 86 115-801 standards.

## APPLICATIONS

Telecommunications market, where long single mode optical fibre cables can run upwards of 50km. In these extreme situations the connector needs to have extremely low losses and accurate geometry.

CATV, LAN, MAN, WAN, Test & Measurement, Industry, Medical and Sensors.

## SPECIFICATIONS

Ferrule Diameter	2.5 mm
Shell Colour	Metallic
2mm Boot Colour	white
900µm Boot	white
Shell Connector versions available for	2 mm Cable, 900 µm Buffered Fibre, Simplex & Duplex
Shell Tensile Strength Cable retention	> 50 N for 2 mm boot versions & > 98 N for 3 mm & 0.9 mm
Coupling Type	Snap

## ORDERING INFORMATION

Part Number	Description
36-MFC1	FC/PC Multimode Connector
36-SFC1	FC/PC Singlemode Connector
36-SFC3	FC/APC Singlemode Connector

## PACKING INFORMATION

Part Number	Packing Length	Packing Mode	N.W (kg)	G.W (kg)	Dimension (mm)
36-MFC1	100 x 5 x 10	Carton Box	11.5	12.5	545 x 260 x 395
36-SFC1	100 x 5 x 10	Carton Box	11.5	12.5	545 x 260 x 395
36-SFC3	100 x 5 x 10	Carton Box	11.5	12.5	545 x 260 x 395