

## FC Connector

Best used in single mode applications and known for exceptionally accurate positioning, the FC or Fixed Connection Connector is designed for use in unstable environments because of their threaded barrel housing which provides a secure connection. As one of the most popular connectors used today its applications include CATV, Active device termination, Telecommunication networks, Metro networks, test equipment, multimedia, industrial, and military applications. HUAKE carries three different versions of the FC; FC/APC, FC/PC and FC Connector Kits.

The FC Connector Kit is also available for those who prefer to assemble the FC connector from its component parts.

SPECIFICATION		SINGLEMODE	MULTIMODE
Insertion Loss	Premium Connector	0.08dB Typical	0.15dB Typical
	Standard Connector	0.12dB Typical	0.20dB Typical
Return Loss		≥ 55dB typical for SM PC ≥ 65dB typical SM PC	
Durability		<0.1dB typical change, 500 matings	<0.1dB typical change, 500 matings
Operating Temperature		-40°C to +75°C	-40°C to +75°C
Ferrule Hole Sizes (Custom sizes available)		125.5µm +1/-0 (SM) Concentricity: ≤ 1µm	127µm (MM)
		126µm +1/-0 (SM) Concentricity: ≤ 1µm	144µm (MM)
		125µm +1/-0 (SM) Concentricity: ≤ 1µm	230µm (MM)
		Custom Sizes	

Specifications shown above were obtained using HUAKE recommended products and procedures.

## FC Premium

## 1 PC Connector



900µm Premium

2.0mm Premium

3.0mm Premium

CODE	FERRULE I.D.	BOOT	COLOR
351 Nickel Plated Brass Body	101 SM: 125.5µm	1 3.0mm Cable Standard	1 Blue
	102 SM: 126µm	2 900µm Fiber Buffer	2 Black
	103 SM: 125µm	3 2.0mm Fiber	3 Green
	201 SM: 127µm	4 3.0mm Cable Short	4 Red
	202 SM: 230µm	5 2.4mm Cable Short	5 Gray
	203 SM: 144µm	6 2.0mm Cable Short	6 Yellow
		7 <b>3.0mm Premium (Telcordia)</b>	7 White
		8 <b>900µm Premium (Telcordia)</b>	8 Beige
		9 2.0mm Cable Standard	
	A <b>2.0mm Premium (Telcordia)</b>		
	B 900µm Fiber Boot		

ORDER CODE example:.

**351 - 201 - 28**

### APPLICATIONS

- CATV
- Metro
- Active device termination
- Test equipment
- Telecommunication networks
- Local Area Networks (LANs)
- Wide Area Networks (WANs)
- Data processing networks
- Premise installations
- Industrial and military

### FEATURES

- Compliance with Telcordia, TIA/IEA, IEC and JIS interface specifications\*
- Low insertion loss & back reflection\*
- One-piece construction & pull-proof design
- Free-floating ceramic ferrule
- Precision anti-rotation key and corrosion resistant body
- UL 94 V-0 boots in a variety of colors
- Telcordia style boots
- Adapters with choice of metal & flange options

Note:

1. When terminated using SENKO recommended procedures.
2. Add 1.6 to order code to specify 1.6 mm cable option. Custom configurations available upon request.

## FC-APC Premium

### 1 PC Connector



900 μm Premium

2.0mm Premium

3.0mm Premium

CONNECTOR	FERRULE I.D.	FERRULE POLISH	BOOT
<b>292</b> Step Ferrule	<b>201</b> SM: 125.5μm	<b>1</b> No Angle	<b>1</b> 3.0mm Cable Standard
<b>293</b> Conical Ferrule	<b>202</b> SM: 126μm	<b>2</b> 8° Pre-Angle	<b>2</b> 900μm Fiber Short
	<b>203</b> SM: 125μm		<b>3</b> 2.0mm Fiber
			<b>4</b> 3.0mm Cable Short
			<b>5</b> 2.4mm Cable Short
			<b>6</b> 2.0mm Cable Short
			<b>7</b> <b>3.0mm Premium (Telcordia)</b>
			<b>8</b> <b>900μm Premium (Telcordia)</b>
			<b>9</b> 2.0mm Cable Standard
			<b>A</b> <b>2.0mm Premium (Telcordia)</b>
			<b>B</b> 900μm Fiber Boot

ORDER CODE example:.

**293 - 203 - 16**

## FC Standard



900 μm Fiber

2.0mm Cable

3.0mm Cable

CODE	FERRULE I.D.	BOOT	BOOT COLOR
<b>341</b> Preassembled Key Ring	<b>101</b> SM: 125.5μm	<b>1</b> 3.0mm Cable Standard	<b>1</b> Blue
<b>331</b> Unassembled Key Ring	<b>201</b> MM: 127μm	<b>2</b> 900μm Fiber (Buffer) Boot	<b>2</b> Black
		<b>9</b> 2.0mm Cable Standard	<b>4</b> Red
			<b>6</b> Yellow
			<b>8</b> Beige

ORDER CODE example:.

**341 - 101 - 11**

### APPLICATIONS

- CATV
- Metro
- Active device termination
- Test equipment
- Telecommunication networks
- Local Area Networks (LANs)
- Wide Area Networks (WANs)
- Data processing networks
- Premise installations
- Industrial and military

### FEATURES

- Compliance with Telcordia, TIA/IEA, IEC and JIS interface specifications\*
- Low insertion loss & back reflection\*
- One-piece construction & pull-proof design
- Free-floating ceramic ferrule
- Precision anti-rotation key and corrosion resistant body
- UL 94 V-0 boots in a variety of colors
- Telcordia style boots
- Adapters with choice of metal & flange options

Note:

1. When terminated using SENKO recommended procedures.
2. Custom configurations available upon request.

## FC Square Adapter

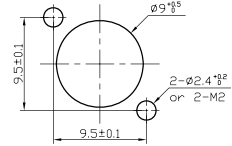


FC Square Adapter, Standard Body



FC Square Adapter, Solid Body

### MOUNTING HOLE DIMENSIONS



FC Square Adapter, Standard Body

ADAPTER TYPE	SLEEVE	KEYWIDTH
259 Standard Body - MM/SM	1 Zirconia Straight Split	01 For PC Connector 2.15 +0.05/-0
297 Solid Body - MM/SM	2 Phosphor Bronze	02 For APC Connector 2.05 +/- 0.02

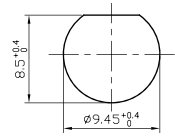
ORDER CODE example:..

297 - 2 01

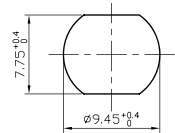
## FC Round Adapter



FC Round Adapter, D Style



FC Round Adapter D Style



FC Round Adapter DD Style

CODE	SLEEVE	KEYWIDTH	FLANGE
253 FC Round Adapter "D" & "DD"	1 Zirconia Straight Split	0 For PC Connector 2.15 +0.05/-0	3 D: Ø8.85mm x 7.95m
	2 Phosphor Bronze	2 For APC Connector 2.05 +/- 0.02	4 DD: Ø9.35mm x 7.65mm

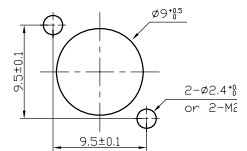
ORDER CODE example:..

253 - 103

## FC Oval Adapter



FC Oval Adapter, HD Style



FC Oval Adapter, HD Style

CODE	SLEEVE	KEYWIDTH
298 FC Oval Adapter "HD"	1 Zirconia Straight Split	01 For PC Connector 2.15 +0.05/-0
	2 Phosphor Bronze	02 For APC Connector 2.05 +/- 0.02

ORDER CODE example:..

298 - 1 01

## ST Connector

A straight tip or ST connector is characterized by its quick release bayonet style lock and spring loaded ferrule to hold the fiber. Most commonly used in network applications such as LANs, and Data Processing Networks, they are also found in Premise installations and Instrumentations applications. Horizontally mounted simplex and duplex adapters are available with metal or plastic housings.

SPECIFICATION		SINGLEMODE	MULTIMODE
<b>Insertion Loss</b>	<b>Premium ST Connector</b>	0.20dB	0.25dB
	<b>Standard ST Connector</b>	0.25dB	0.35dB
<b>Return Loss</b>	≥ 55dB typical for SM PC		
<b>Durability</b>	<0.25dB typical change,500 matings		<0.25dB typical change,500 matings
<b>Operating Temperature</b>	-40°C to +75°C		-40°C to +75°C
<b>Ferrule Hole Sizes</b> (Custom sizes available)	125.5µm +1/-0 (SM)	Concentricity: ≤ 1µm	127µm (MM)
	126µm +1/-0 (SM)	Concentricity: ≤ 1µm	144µm (MM)
	125µm +1/-0 (SM)	Concentricity: ≤ 1µm	230µm (MM)
	Custom		Custom

Specifications shown above were obtained using HUAKE recommended products and procedures.

### APPLICATIONS

- Local Area Networks (LANs)
- Data Processing Networks
- Premise Installations
- Instrumentation

### FEATURES

- Bayonet style housing for easy termination
- Epoxy and epoxy free versions
- High Precision alignment
- Low insertion and return loss and back reflection

## ST Premium

## 1 PC Connector



900µm Premium

2.0mm Premium

3.0mm Premium

CODE	FERRULE	BOOT TYPE	BOOT COLOR
<b>215</b>	101 SM: 125.5µm	1 3.0mm Cable Standard	1 Blue
	102 SM: 126µm	2 900µm Fiber Short	2 Black
	103 SM: 125µm	3 2.0mm Fiber	3 Green
	201 SM: 127µm	4 3.0mm Cable Short	4 Red
	202 SM: 230µm	5 2.4mm Cable Short	5 Gray
	203 SM: 144µm	6 2.0mm Cable Short	6 Yellow
		7 <b>3.0mm Premium (Telcordia)</b>	7 White
		8 <b>900µm Premium (Telcordia)</b>	8 Beige
		9 2.0mm Cable Standard	
	A <b>2.0mm Premium (Telcordia)</b>		
	B 900µm Fiber Boot		

ORDER CODE example:.

**215 - 101 - 35**

Note:

Add 1.6 to order code to specify 1.6 mm cable option. Custom configurations available upon request.

## ST Standard

## 1 PC Connector



### APPLICATIONS

- Local Area Networks (LANs)
- Data Processing Networks
- Premise Installations
- Instrumentation

### FEATURES

- Bayonet style housing for easy termination
- Epoxy and epoxy free versions
- High Precision alignment
- Low insertion and return loss and back reflection

CODE	FERRULE	BOOT TYPE	BOOT COLOR
233 ST Standard	101 SM: 125.5µm	1 3.0mm Cable Standard	1 Blue
	201 MM: 127µm	2 900µm Fiber Buffer	2 Black
		9 2.0mm Cable Standard	4 Red
			6 Yellow
			8 Beige

ORDER CODE example: **233 - 101 - 96**

## ST Adapter



CODE	SLEEVE
216 Simplex Metal Housing	101 Zirconia Straight Split
316 Duplex Horizontal Metal Housing	102 Phosphor Bronze
317 Duplex Horizontal Plastic Housing	

ORDER CODE example: **316 - 101**

## DIN Premium

## 1 PC Connector



SPECIFICATION	SINGLEMODE	MULTIMODE
<b>Ferrule Hole Sizes</b> (Custom sizes available)	125.5µm +1/-0 (SM) 126µm +1/-0 (SM) 125µm +1/-0 (SM) Custom Sizes	Concentricity: ≤ 1µm Concentricity: ≤ 1µm Concentricity: ≤ 1µm Custom
		127µm (MM) 144µm (MM) 230µm (MM) Custom

CODE	FERRULE	BOOT TYPE	BOOT COLOR
213	101 SM: 125.5µm	1 3.0mm Cable Standard	1 Blue
	102 SM: 126µm	2 900µm Fiber Short	2 Black
	103 SM: 125µm	9 2.0mm Cable Standard	3 Green
	201 MM: 127µm		4 Red
			5 Gray
			6 Yellow
			7 White
			8 Beige

ORDER CODE example: **213 - 103 - 21**

CODE	FERRULE I.D.	FERRULE POLISH	BOOT
203	201 SM: 125.5µm	1 No Angle	1 3.0mm Cable Standard
209	202 SM: 126µm	2 8° Pre-Angle	2 900µm Fiber Short
	203 SM: 125µm		9 2.0mm Cable Standard

ORDER CODE example: **203 - 203 - 11**

## DIN Adapter



DIN Adapter

CODE	SLEEVE
214	101 Zirconia Straight Split
	102 Phosphor Bronze

ORDER CODE example: **214 - 101**

### APPLICATIONS

- CATV & multimedia
- Metro applications, premise installations
- Active device termination
- Test equipment
- Telecommunication networks
- Local & Wide Area Networks (LANs, WANs)
- Data processing networks
- Industrial, medical & military

### FEATURES

- Compatible with DIN 47256
- Spring-loaded free floating ferrule piece construction
- Free-floating ceramic ferrule design
- Corrosion resistant body
- Compact design
- Low insertion loss & back reflection\*

### Note:

1. When terminated using SENKO recommended procedures.
2. Add 1.6 to order code to specify 1.6 mm cable option. Custom configurations available upon request

## D4 Connector



### APPLICATIONS

- Telecommunications networks
- Local Area Networks (LAN)

### FEATURES

- Corrosion resistant body (Nickel Plated Brass)
- Choice of crimp style or epoxy-free, crimp free termination
- Variety of boot types and colors

*Note:*  
Add 1.6 to order code to specify 1.6 mm cable option.  
Custom configurations available upon request

CODE	FERRULE	BOOT TYPE	BOOT COLOR	
272 D4 Crimp Style	102 SM: 126µm	1 3.0mm Cable Standard	1 Blue	
		2 900µm Fiber Short	2 Black	
		9 2.0mm Cable Standard	3 Green	
	103 SM: 125µm			4 Red
				5 Gray
				6 Yellow
				7 White
				8 Beige

ORDER CODE example: **272 - 102 - 21**

CODE	FERRULE	BOOT TYPE	BOOT COLOR	
271 D4 Crimp Free Connector	102 SM: 126µm	1 3.0mm Cable Short	1 Blue	
			2 Black	
	103 SM: 125µm			4 Red
				7 White

ORDER CODE example: **271 - 103 - 17**

## D4 Adapter

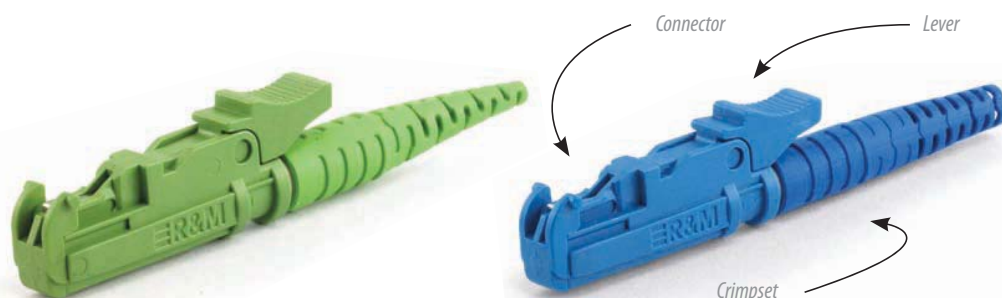


D4 Adapter

CODE	SLEEVE
273 D4 Adapter	201 Phosphor Bronze Split



## E-2000™ Connector



E 2000 Connector

INSERTION LOSS	UNIT	TYPICAL	MAX
<b>Multimode</b>	dB	0.2	0.3
<b>Singlemode, PC</b>	dB	0.2	0.4
<b>Singlemode, APC 8°</b>	dB	0.2	0.4
RETURN LOSS	UNIT	TYPICAL	MINIMUM
<b>Singlemode, PC</b>	dB	50	45
<b>Singlemode, APC 8°</b>	dB	80*	60
MECHANICAL PROPERTIES	UNIT		
<b>Mating Cycles</b>	n/a	1000	
<b>Temperature Cycling</b>	°C	-25 to +70, 12 cycles	
MATERIALS			
<b>Housing, Protective Cap and Tension Relief</b>	PBT/UL94V-0		

CONNECTOR CODE	DESCRIPTION
<b>R304378</b>	Simplex,PC,Multimode,Black
<b>R304379</b>	Simplex, PC, Singlemode, Blue
<b>R305290</b>	Simplex, APC ,Singlemode, Green

CONNECTOR LEVER CODE	DESCRIPTION	CONNECTOR LEVER CODE	DESCRIPTION
<b>R304403</b>	White	<b>R304407</b>	Orange
<b>R307017</b>	Blue	<b>R304408</b>	Red
<b>R304405</b>	Brown	<b>R309210</b>	Black
<b>R307018</b>	Green	<b>R304832</b>	Yellow
<b>R308035</b>	Violet	<b>R308034</b>	Turquoise

CRIMPSET CODE	DESCRIPTION	CRIMPSET CODE	DESCRIPTION
<b>R304385</b>	For Pigtail,Black	<b>R306363</b>	For 2.0 ~ 2.2 Cable,Green
<b>R304386</b>	For Pigtail,Blue	<b>R306738</b>	For 2.6 ~ 2.9 Cable,Black
<b>R304387</b>	For Pigtail,Green	<b>R306736</b>	For 2.6 ~ 2.9 Cable,Blue
<b>R306359</b>	For 1.7 ~ 2.0 Cable,Black	<b>R306737</b>	For 2.6 ~ 2.9 Cable,Green
<b>R306358</b>	For 1.7 ~ 2.0 Cable,Blue	<b>R306365</b>	For 2.9 ~ 3.2 Cable,Black
<b>R306360</b>	For 1.7 ~ 2.0 Cable,Green	<b>R306364</b>	For 2.9 ~ 3.2 Cable,Blue
<b>R309215</b>	For 1.7 ~ 2.0 Cable,Red	<b>R306366</b>	For 2.9 ~ 3.2 Cable,Green
<b>R306362</b>	For 2.0 ~ 2.2 Cable,Black	<b>R309214</b>	For 2.9 ~ 3.2 Cable,Red
<b>R306361</b>	For 2.0 ~ 2.2 Cable,Blue		

### APPLICATIONS

- WANs, LANs, CATV
- Metrology, Railway, Industry

### FEATURES

- Secure transmission of high bit-rate protocols
- Zirconia ceramic ferrule fully protected by spring loaded shutter
- Push-pull locking mechanism for easy installation
- Color coded release levers
- Compliant with European (EN 186270) and International (IEC 61754-15) standards
- Tested and approved by Swisscom

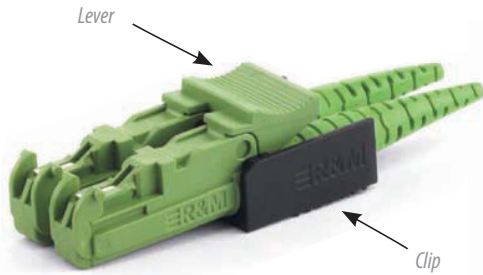
#### Note:

1. Levers with mechanical coding also available
2. Each E2000 is made by the following sub components:
  - Connector
  - Lever
  - Crimpset



## E-2000™

### Compact (Duplex) Accessories



E-2000™ Compact APC Connector



E-2000™ Compact MM Connector

#### APPLICATIONS

- WANs, LANs, CATV
- Metrology, Railway, Industry

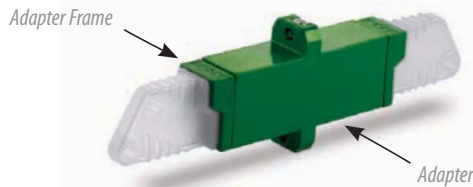
#### FEATURES

- Secure transmission of high bit-rate protocols
- Zirconia ceramic ferrule fully protected by spring loaded shutter
- Push-pull locking mechanism for easy installation
- Color coded release levers
- Compliant with European (EN 186270) and International (IEC 61754-15) standards
- Tested and approved by Swisscom

COMPACT (RJ) CONNECTOR LEVER AND HOUSING CLIP CODE	DESCRIPTION	COMPACT (RJ) CONNECTOR LEVER AND HOUSING CLIP CODE	DESCRIPTION
R305513	Blue	R305517	Black
R305514	Green	R305518	White
R305515	Orange	R305542	Compact (RJ) Clip for Connector Housing
R309004	Turquoise		

## E-2000™

### Adapters and Adapter Frames



E-2000™ APC Simplex Adapter

Note:  
Levers with mechanical coding also available

SIMPLEX ADAPTER CODE	DESCRIPTION	SIMPLEX ADAPTER FRAME CODE	DESCRIPTION
R508019	Black	R304410	Blue
R504511	Blue	R304411	Brown
R504512	Green	R304412	Green
R517677	Quick mounting clip	R304413	Red
R504981	Black without frames	R304414	Black
R504831	Blue without frames	R304415	Orange
R505612	Green without frames	R304416	White
		R304833	Yellow
		R308036	Violet
		R308037	Turquoise



E-2000™ Simplex Adapter Frames



E-2000™ APC Compact Adapter



E-2000™ Snap in Frame

COMPACT (RJ) ADAPTER FRAME CODE	DESCRIPTION	COMPACT (RJ) ADAPTER WITH SNAP IN FRAME CODE	DESCRIPTION
R305519	Blue	R313001	Adapter and Snap In Frame-PhBr black/black
R305520	Green	R313002	Adapter and Snap In Frame-PhBr black/orange
R305524	Black	R313010	Adapter and Snap In Frame-PhBr black/turquoise
R305521	Orange	R313011	Adapter and Snap In Frame-Ceramics blue/blue
R305525	White	R313009	Adapter and Snap In Frame-Ceramics green/white
R308986	Turquoise		

## SMA Connector



CONNECTOR	FERRULE I.D.	BOOT	COLOR
211 SMA with Hex Nut	201 MM: 127µm	1 3.0mm Cable Standard	1 Blue
	202 MM: 230µm		2 Black
	203 MM: 144µm		3 Green
	204 MM: 245µm		4 Red
	205 MM: 250µm		5 Gray
	206 MM: 360µm		6 Yellow
	207 MM: 460µm		7 White
	208 MM: 240µm		8 Beige
			X Custom

ORDER CODE example:.

211 - 201 - 11

### APPLICATIONS

- Medical
- Surgical
- Aesthetic lasers
- Spectrometers
- Industrial
- Military
- Lasers

### FEATURES

- Threaded nut connector
- One piece construction
- TIA and IEC compliant
- Simple termination
- Single crimp design
- Non-contact connector
- Hex coupling nut

*Note:*  
When terminated using  
SENKO recommended  
procedures.

## SMA Adapter



SMA Adapter

CODE	ADAPTER TYPE
212	101 SMA Adapter

## Connector

## Boots

### FEATURES

- Compatible with Pre-Assembled Connector Series SC, FC, SC/APC, FC/APC, DIN, D4

*Note:*  
These boots will only fit the SC, FC, ST, DIN, D4 Premium and Standard connectors

CRIMP RING TYPE	CRIMP RING	BOOT	BOOT TYPE	ORDER CODE	BOOT COLOR (X)	
HW-20001 3.0 mm			3.0 mm Cable Standard	HW-20008-0X	1	Blue
HW-20026 2.0 mm			2.0 mm Cable Standard	HW-20053-0X	2	Black
N/A	N/A		900µm Fiber Short	HW-20013-0X	3	Green
N/A	N/A		2.0 mm Fiber	HW-20022-0X	4	Red
HW-2001 3.0 mm			3.0 mm Cable Short Boot	HW-20024-30X	5	Gray
HW-20025 2.4 mm			2.4 mm Cable Short Boot	HW-20024-24X	6	Yellow
HHW-20026 2.0 mm			2.0 mm Cable Short Boot	HW-20024-20X	7	White
HW-20001 3.0 mm			3.0mm Premium (Telcordia) for SC Connector	HW-20036-0X	8	Beige
HW-20001 3.0 mm			3.0mm Premium (Telcordia) for FC and ST Connector	HW-20037-0X		
N/A	N/A		900µm Premium (Telcordia)	HW-20038-0X		
HW-20026 2.0 mm			2.0mm Premium (Telcordia) for SC Connector	HW-20057-0X		
HW-20026 2.0 mm			2.0mm Premium (Telcordia) for FC and ST Connector	HW-20058-0X		
HW-20061 1.6 mm		N/A	1.6 mm Crimp Sleeve	HW-20061		