FC Connectors Family

The FC Connector named as Fixed Connection Connector, which is originally developed by Seiko Instruments. It is one of the most popular connectors, because of its rugged metal housing, designed for use in unstable environments which provides a secure connection. The FC is a screw-in (thread) connector and has to be turned to make or break connection.

The SAISO FC connector is available in both singlemode and multimode versions, and fully intermateable with NTT-FC products. Both singlemode and multimode have zirconia ferrules with pre-radiused PC profile and convex spherical end, or the 8o angle (SM) in a step or conical endface for the APC version. All our FC connectors are able to achieve low optical loss and back reflection while ensuring maximum repeatability. FC 1pc Connector and FC Connector kits are available for choices from us.

© Features

- Metal screw-in(thread) housing makes a secure connection
- Precision anti-rotation key and corrosion resistant body
- Low insertion and back reflection loss

- Free-floating ceramic ferrule
- Available with a full range of UL-rated FC boots
- Compliance with Telcordia, TIA/IEA, IEC and JIS

Specification

| Item | Single | emode | Multimode | | | |
|--------------------------|--------------------|-------------------|------------------------------------|------------------------|--|--|
| Insertion Loss | Standard | 0.12dB Typical | Standard | 0.20dB Typical (127µm) | | |
| Insertion Loss | Premium | 0.08dB Typical | Premium | 0.15dB Typical (127µm) | | |
| Return Loss | ≥55dB Ty | rpical (PC) | ≥30dB (PC) | | | |
| | ≥65dB Typ | pical (APC) | | | | |
| Durability | ≤0.1dB typical cha | inge, 500 matings | ≤0.1dB typical change, 500 matings | | | |
| Ferrule Hole Sizes | 125μm +1/-0, Cor | ncentricity: ≤1µm | - 127μm, Concentricity: ≤4μm | | | |
| (Custom sizes available) | 125.5µm +1/-0, Co | oncentricity: ≤µm | | | | |
| Operating Temperature | -40°C t | o +75°C | -40°C to +75°C | | | |

^{*}The above Specifications were obtained by using SAISO recommended products and procedures.

FC/UPC Connectors



0.9mm Pro FC/UPC

| Connector | | Ferrule Type | | Boot Size | | Boot Color | | Boot Type | |
|-----------|------------|--------------|-------------------|-----------|-------|------------|--------|-----------|-----------------|
| 597 | FC/UPC 1pc | 201 | SM Standard 125µm | 1 | 0.9mm | L | Blue | Т | Standard |
| | | 205 | SM Premium 125µm | 2 | 2.0mm | В | Beige | R | Rubber(2.0/3.0) |
| | | 405 | MM Premium 127µm | 3 | 3.0mm | K | Black | | |
| | | | | | | R | Red | | |
| | | | | | | Υ | Yellow | | |

Ordering Example: 597-202-2KR

FC/APC Pro Connectors



0.9mm Pro FC/APC

| Connector | | Ferrule Type | | Boot Size | | Boot Color | | Boot Type | |
|-----------|------------|--------------|-------------------|-----------|-------|------------|--------|-----------|-----------------|
| 598 | FC/UPC 1pc | 201 | SM Standard 125µm | 1 | 0.9mm | L | Blue | Т | Standard |
| | | 205 | SM Premium 125µm | 2 | 2.0mm | В | Beige | R | Rubber(2.0/3.0) |
| | | 405 | MM Premium 127µm | 3 | 3.0mm | K | Black | | |
| | | | | | | R | Red | | |
| | | | | | | Υ | Yellow | | |

Ordering Example: 598-C201-1T

FC/UPC Standard Connectors



0.9mm Standard



3.0mm Standard

| Connector | | Ferrule Type | | Boot Size | | Boot Color | | Boot Type | |
|-----------|------------|--------------|-------------------|-----------|-------|------------|--------|-----------|-----------------|
| 521 | FC/UPC 1pc | 201 | SM Standard 125µm | 1 | 0.9mm | L | Blue | Т | Standard |
| | | 205 | SM Premium 125µm | 2 | 2.0mm | В | Beige | R | Rubber(2.0/3.0) |
| | | 405 | MM Premium 127µm | 3 | 3.0mm | K | Black | | |
| | | | | | | R | Red | | |
| | | | | | | Υ | Yellow | | |

Ordering Example: 521-202-2KR

FC/APC Standard Connectors



0.9mm APC Standard



3.0mm APC Standard

| Connector | | Ferrule Type | | Boot Size | | Boot Color | | Boot Type | |
|-----------|------------|--------------|-------------------|-----------|-------|------------|--------|-----------|-----------------|
| 528 | FC/APC 1pc | 201 | SM Standard 125µm | 1 | 0.9mm | L | Blue | Т | Standard |
| | | 205 | SM Premium 125µm | 2 | 2.0mm | В | Beige | R | Rubber(2.0/3.0) |
| | | 405 | MM Premium 127µm | 3 | 3.0mm | K | Black | | |
| | | | | | | R | Red | | |
| | | | | | | Υ | Yellow | | |

Ordering Example: 528-C201-1T

FC Adapters

SAISO provides a variety of FC Adapters in Round, Solid, Split and Oval mount configurations with a choice of zirconia or phosphor bronze sleeves. They perform well withdrawal force.

The FC Round and Square Adapters are available in the standard body styles with nickel plated brass or nickel plated zinc housing, they are available both of singlemode and multimode with different shape of flanges. SAISO is providing FC Adapters with Standard and Premium two quality levels for choices, to better suit different applications and requirements. The plastic FC Adapters are available upon request.

© Features

- High precision alignment
- Low insertion and back reflection loss
- NTT-FC compatibility

- Both of nickel plated brass or zinc housing are available
- Telcordia, TIA/IEA, IEC and JIS compliance

Specification

| Item | Value Zirconia Sleeve: 0.10dB typical, ≤0.20dB Max Phosphor Bronze Sleeve: 0.15dB typical, ≤0.30dB Max | | | | | |
|---------------------------------|--|--|--|--|--|--|
| Insertion Loss | | | | | | |
| Durability | ≤0.1dB typical change, 500 matings 2.0N ~ 5.9N (200gf ~ 600gf) | | | | | |
| Sleeve/Ferrule Withdrawal Force | | | | | | |
| Operating Temperature | -40°C to +75°C | | | | | |

^{*}The above Specifications were obtained by using SAISO recommended products and procedures.







FC Split Adapter



FC Oval Adapter

| Adapter | | Flange | | | Sleeve | Key Width | | |
|---------|-------------------------|--------|--------------|------------|-----------------|-----------|---------------------------|--|
| 557 | FC(Nickel Brass Plated) | 1 | "DD" , ø11mm | 1 Zirconia | | Р | For PC Connector, 2.15mm | |
| | | 2 | "D" , ø14mm | 2 | Phosphor Bronze | Α | For APC Connector, 2.05mm | |
| | | 3 | Solid | | | | | |
| | | 4 | Split | | | | | |
| | | 5 | Oval | | | | | |
| | | 6 | Rectangular | | | | | |

Ordering Example: 557-11P