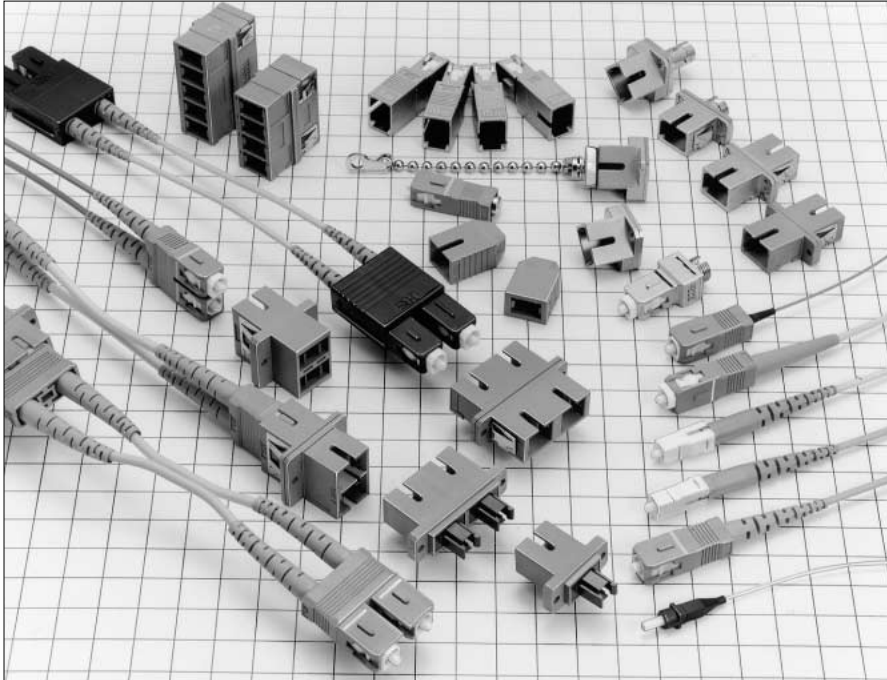


SC-type Optical Fiber Connectors

HSC Series



■ Features

1. SC-Type Correspondence

These connectors can be used with the NTT.
SC-Type optical fiber connectors.
JIS C5973 (F04 optical fiber connectors)
IEC 60874-14C
IEC 60874-19C

2. Plugs With Strengthened Cable Clamps

These plugs suppress the increase in cable loss that results from a pulling force in the vertical bend direction of the cable clamp portion.
The color coding of the boot permits identification of polishing such as PC polishing, Advanced PC (AdPC) polishing and Angled PC polishing.
(PC polishing: blue, Advanced PC (AdPC) polishing: light purple, Angled PC polishing (APC): green)

3. Zirconia Split Sleeve Adapter

Reduces the powder caused by the insertion and withdrawal abrasion within the split sleeve and improves the repetitive optical reproducibility.

4. Duplex SC-type: Flexible Type -- Compliant With ANSI Standards

Dimensions between the plug pitch are flexible and parallel mounting of receptacle is made easier.
There is also compatibility with the HSCF rigid type.

5. Duplex SC-type: Rigid Type

Available in the H-type which has an 8.5-mm pitch between terminals and is suited for high-density mounting, and in the F-type which features a low profile and a 12.7mm pitch between terminals and is suited to LAN applications. Please see Pages 40 to 43.

6. Panel Mount Receptacle

By greatly reducing the number of components compared with the conventional receptacles, space savings and cost-reduction have been achieved. Please see Pages 35 to 38.

■ Applications

LAN, public communications lines, CATV, computer transmission systems, measuring instruments, etc.

Product Standards

| | | | | |
|--------|-----------------------------|------------|---------------------------|------------|
| Rating | Operating temperature range | -25°C~70°C | Storage temperature range | -25°C~70°C |
|--------|-----------------------------|------------|---------------------------|------------|

| Item | | Test Method (JIS C 5961) | | Standard |
|--|---|---|--|---|
| Optical Performance | Insertion loss | (SM) | 1300nm wavelength (LD) | 0.5 dB or less (PC, AdPC, APC) |
| | | (GI) | 1300nm wavelength (LED) | 0.3 dB or less (PC) |
| | Reflection attenuation | (SM) | 1300-nm wavelength (LD) | 22 dB or greater (PC) 40 dB (AdPC) |
| | | (GI) | | 22 dB or greater (PC) |
| Mechanical Performance | Coupling force and decoupling force | | Measure when connectors are coupled and separated in the direction of the axis. | Simplex plugs Coupling force 19.6 N or less Separation force 19.6 N or less Duplex plugs Coupling force 39 N or less Separation force 39 N or less |
| | Split sleeve holding force of the adapter | | Ceramic gauge of $\phi 2.499 \pm 0.0005$ mm | Phosphor bronze 2 to 5.9 N Zirconia 2 to 3.9 N |
| | Split sleeve holding force of the adapter | | 98 N of pulling force between connector and cable for one minute (Bellcore TA-TSY-00326) | 1) Insertion loss fluctuation after test: 0.2 dB or less 2) No irregularity in clamp section or cable |
| | Repetitive operation | | 1000 times | 1) Insertion loss fluctuation after test: 0.2 dB or less 2) No damage, cracks, or part looseness |
| | Vibration resistance | | Vibration range of 10 to 55 Hz, 0.75mm single amplitude 98.1 m/s ² acceleration, in 3-axis directions, 2 hours each | |
| | Shock resistance | | Acceleration of 981 m/s ² , operation time of 6 ms, sine half wave in X, Y, and Z axes, 10 times each (Total of 30 times) | |
| Humidity resistance (Temperature and humidity cycle) | | Temperature -10°C to 65°C, humidity 90 to 96% 20 cycles | | |
| Environmental performance | Temperature cycle | | Temperature -40°C to 75°C 42 cycles (Bellcore TA-NWT-00326) | No conspicuous corrosion |
| | Heat resistance | | Left for 960 hours at a temperature of 85°C | |
| | Cold resistance | | Left for 960 hours at a temperature of -25°C | |
| | Salt fog | | Left in a 5% concentration of salt fog for 48 hours | |

Materials






| Component | Material | Notes |
|--------------------------|---|---|
| Simplex plug casing | Polybutylene terephthalate | Plastic items NTT, SC corresponding items |
| Coil spring | Stainless steel | |
| Ferrule | Zirconia | |
| Simplex adapter casing | Polybutylene terephthalate or zinc die cast | |
| 4-ganged adapter housing | Polybutylene terephthalate | |
| 5-ganged adapter housing | Polybutylene terephthalate | |
| Receptacle casing | Zinc die cast | |
| Attenuator casing | Zinc die cast | |
| Split sleeve | Copper alloy or zirconia | |

HSC-type Connectors Function Diagrams

Simplex Type





<Manual Coupling / Decoupling Connectors>

Plug Housing



| |
|---|
| <p>φ3mm short-type boot</p>  <p>HSC-PH3-A4</p> |
| <p>φ2mm short-type boot</p>  <p>HSC-PH2-A4</p> |
| <p>For φ0.9mm cable</p>  <p>HSC-PH0.9-A</p> |
| <p>Reinforced-type cable clamp</p>  <p>HSC-PH2,E1,E2 HSC-PH2-B1,B2 HSC-PH2-B5 HSC-PH3-B1,B2 HSC-PH3-B5</p> |
| <p>Conversion plug SC (plug) to FC (jack)</p>  <p>HSCP-HRFCJ-1,2</p> |

<Jig Coupling / Decoupling Connectors>




Plug Housing

| |
|--|
| <p>φ3mm short-type boot</p>  <p>HSC2-PH3-A</p> |
| <p>φ2mm short-type boot</p>  <p>HSC2-PH2-A</p> |
| <p>For φ0.9mm cable</p>  <p>HSC2-PH0.9-A</p> |
| <p>Reinforced-type cable clamp</p>  <p>HSC2-PH2 E1,E2 HSC2-PH2-B1,B2,B5 HSC2-PH3-B1,B2,B5</p> |


Adapters(panel mounting type)

| |
|---|
| <p>Adapter panel mounting</p>  <p>HSC-A2,HSC-A2-D1</p> |
| <p>Adapter panel mounting</p>  <p>HSC-A2,HSC-A2-D1</p> |



Conversion Adapters

| |
|---|
| <p>SC (jack) to FC (jack) screw mounting</p>  <p>HSCJ-HRFCJ-B HSCJ-HRFCJ-A</p> |
| <p>SC (jack) to FC (jack) panel mounting</p>  <p>HSCJ-HRFCJ-C</p> |
| <p>ST conversion type screw mounting</p>  <p>HSCJ-HSTJ-B</p> |

Receptacle



| |
|--|
| <p>ST conversion type screw mounting</p>  <p>HSC-R1-B,R2-B HSC-R1-A,R2-A</p> |
|--|

Panel Mount Receptacle

| |
|--|
|  <p>HSC-SR-2</p> |
|  <p>HSC2-8SR-1 HSC2-8SR-D1 HSC2-8SR-1(01)</p> |

(see page 36 to 38 for variety of PanelMount Plug.)

Adapters

| |
|---|
| <p>(4-Ganged) Panel mounting type</p>  <p>HSC2-4A,HSC2-4A-D1</p> |
| <p>(5-Ganged) Panel mounting type</p>  <p>HSC2-5A,HSC2-5A-D1</p> |

Duplex Type

<Flexible Type ANSI Standard>

<Flexible Type ANSI Standard>

φ2 mm and φ3 mm for single mode



HSCM-2PH2,3-B1
HSCM-2PH2,3-B2

φ2 mm and φ3 mm for multimode



HSCM-2GPH2,3-B1

F-type

Plug housing (φ2 mm and φ3 mm)



HSCF-2PH2,3-※

Adapter

Panel mounting type



HSCF-2A※

H-type

Plug housing (φ2 mm and φ3 mm)



HSCH-2PH2,3-※

Adapter

Panel mounting type



HSCH-2A1(P)

Screw mounting type



HSCH-2A※

Fixed Attenuators

For multimode (5 dB, 10 dB, 15 dB, and 20 dB)



HSC-AT※S-B※※A

For single mode (5 dB, 10 dB, 15 dB, and 20 dB)



HSC-AT※S-A ※※A

See page 91 in detail.

Terminators

Plug Type

Manual coupling/decoupling type



HSC-TM-P1

Jig coupling/decoupling type



HSC2-TM-P1

Receptacle Type

Manual coupling/decoupling type



HSC-TM-R1

Jig coupling/decoupling type



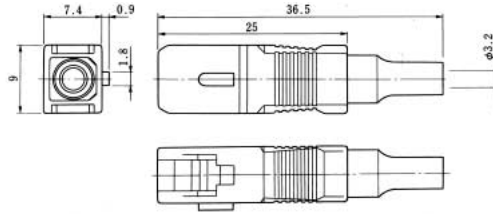
HSC2-TM-R1

See page 87 in detail.

Simplex Type

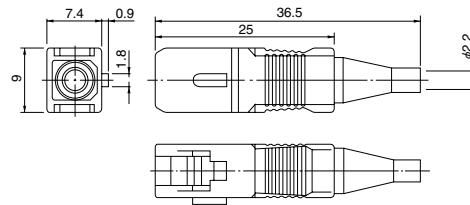
Manual Coupling / Decoupling Type Plug Housing

Short Boot Type (Applicable cable diameter: 3 mm)



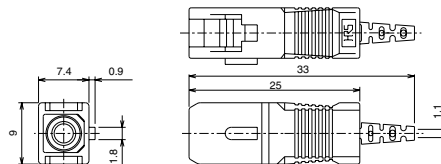
| HRS NO. | Product Number | Applicable Cable Diameter | Color of Boot | Polishing |
|-------------------|-----------------|---------------------------|---------------|-----------|
| CL704-0245-0 (01) | HSC-PH3-A4 (01) | $\phi 3\text{mm}$ | Blue | PC |
| CL704-0245-0 (02) | HSC-PH3-A4 (02) | | Light purple | AdPC |

Short Boot Type (Applicable cable diameter: 2 mm)



| HRS NO. | Product Number | Applicable Cable Diameter | Color of Boot | Polishing |
|-------------------|-----------------|---------------------------|---------------|-----------|
| CL704-0244-8 | HSC-PH2-A4 | $\phi 2\text{mm}$ | Blue | PC |
| CL704-0244-8 (01) | HSC-PH2-A4 (01) | | Light purple | AdPC |
| CL704-3021-0 | HSC-PH2-A41 | | Green | APC |

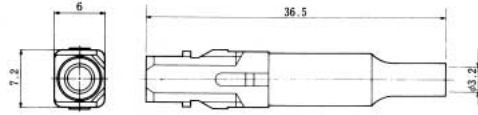
For $\phi 0.9\text{-mm}$ Optical Fiber Cable diameter: 3 mm)



| HRS NO. | Product Number | Applicable Cable Diameter | Color of Boot | Polishing |
|--------------|----------------|---|---------------|-----------|
| CL704-0339-2 | HSC-PH0.9-E1 | $\phi 0.9\text{mm}$ Optical fiber cable | Blue | PC |
| CL704 | HSC-PH0.9-E5 | | Green | APC |
| CL704-0354-6 | HSC-PH0.9-E2 | | Light purple | AdPC |

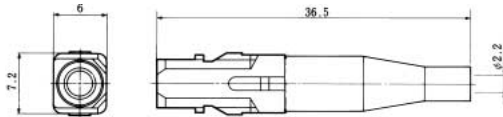
Manual Coupling / Decoupling Type Plug Housing

Short Boot Type (Applicable cable diameter: 3 mm)



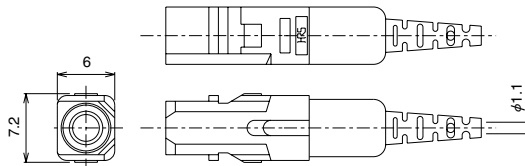
| HRS NO. | Product Number | Applicable Cable Diameter | Color of Boot |
|--------------|----------------|---------------------------|---------------|
| CL704-0015-0 | HSC2-PH3-A | φ3mm | Yellow |

Short Boot Type (Applicable cable diameter: 2 mm)



| HRS NO. | Product Number | Applicable Cable Diameter | Color of Boot |
|--------------|----------------|---------------------------|---------------|
| CL704-0014-8 | HSC2-PH2-A | φ2mm | Blue |

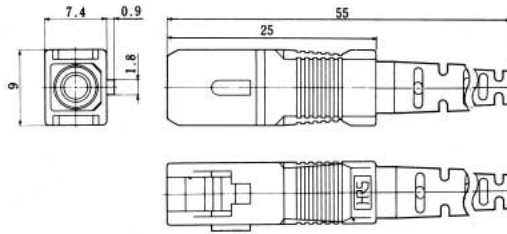
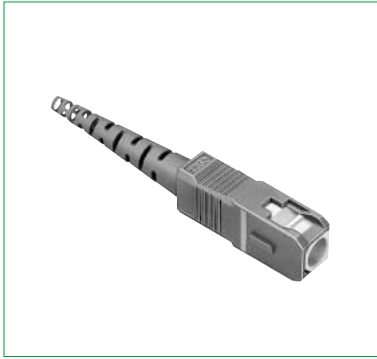
For φ0.9-mm Optical Fiber Cable



| HRS NO. | Product Number | Applicable Cable Diameter | Color of Boot |
|---------|----------------|----------------------------|---------------|
| — | HSC2-PH0.9-E1 | φ0.9mm Optical fiber cable | Blue |
| — | HSC2-PH0.9-E2 | | Light purple |

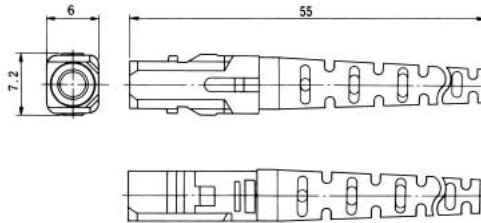
■ Reinforced-type Cable Clamp Plug Housing

● Manual Coupling / Decoupling Type



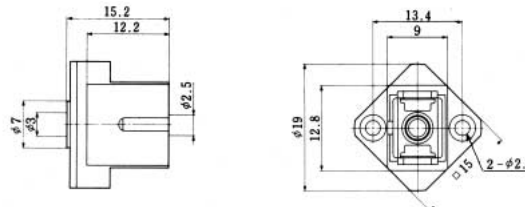
| HRS NO. | Product Number | Applicable Cable Diameter | Color of Boot | Polishing | Notes |
|--------------|----------------|---------------------------|---------------|-----------|-------------------------------|
| CL704-0327-3 | HSC-PH2-E1 | φ2mm | Blue | PC | NTT SC corresponding items |
| CL704-0328-6 | HSC-PH2-E2 | | Light purple | AdPC | |
| CL704-0220-0 | HSC-PH2-B1 | | Green | PC | NTT SC corresponding items |
| CL704-0221-2 | HSC-PH2-B2 | | Light purple | AdPC | |
| CL704-3019-8 | HSC-PH2-B5 | | Green | APC | — |
| CL704-0281-4 | HSC-PH2-B6 | | White | AdPC | |
| CL704-0376-9 | HSC-PH2-E5 | φ2mm | Green | APC | NTT SC corresponding items |
| CL704-0222-5 | HSC-PH3-B1 | φ3mm | Blue | PC | |
| CL704-0223-8 | HSC-PH3-B2 | | Light purple | AdPC | |
| CL704-3020-7 | HSC-PH3-B5 | | Green | APC | |
| CL704-0282-7 | HSC-PH3-B6 | | White | AdPC | |

● For Jig Coupling / Decoupling



| HRS NO. | Product Number | Applicable Cable Diameter | Color of Boot | Polishing | Notes |
|--------------|----------------|---------------------------|---------------|-----------|-------------------------------|
| CL704-0329-9 | HSC2-PH2-E1 | φ2mm | Blue | PC | NTT SC corresponding items |
| CL704-0330-8 | HSC2-PH2-E2 | | Light purple | AdPC | |
| CL704-0224-0 | HSC2-PH2-B1 | | Green | PC | NTT SC corresponding items |
| CL704-0225-3 | HSC2-PH2-B2 | | Light purple | AdPC | |
| — | HSC2-PH2-B5 | | Green | APC | — |
| CL704-0283-0 | HSC2-PH2-B6 | | White | AdPC | |
| — | HSC2-PH2-E5 | φ2mm | Green | APC | NTT SC corresponding items |
| CL704-0226-6 | HSC2-PH3-B1 | φ3mm | Blue | PC | |
| CL704-0227-9 | HSC2-PH3-B2 | | Light purple | AdPC | |
| — | HSC2-PH3-B5 | | Green | APC | |
| CL704-0284-2 | HSC2-PH3-B6 | | White | AdPC | |

■ Receptacles

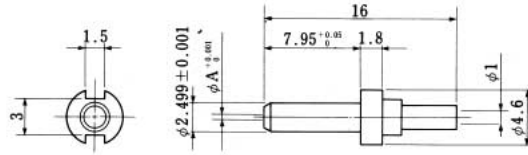


NOTE: This product is for power meter sensor application.

| HRS NO. | Product Number | φ2.5mm Dimension Tolerance | Notes |
|--------------|----------------|----------------------------|-------|
| CL704-0022-6 | HSC-R1-B | +0.011 +0.001 | MM |
| CL704-0023-9 | HSC-R2-B | +0.006 +0.001 | SM |

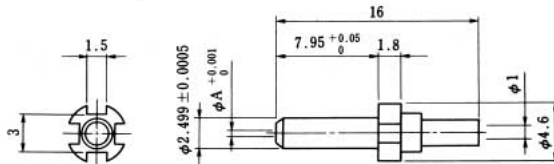
Ferrules

GI



| HRS NO. | Product Number | Dimension A | Applicable Optical Fiber | Fiber Entrance Angle |
|--------------|----------------|-------------|--------------------------|----------------------|
| CL704-0103-6 | HSC-F321-B124 | 0.124 | GI-50/125 | 60° |
| CL704-0104-9 | HSC-F321-B125 | 0.125 | | |
| CL704-0105-1 | HSC-F321-B126 | 0.126 | | |
| CL704-0106-4 | HSC-F321-B127 | 0.127 | | |
| CL704-0107-7 | HSC-F321-B128 | 0.128 | | |

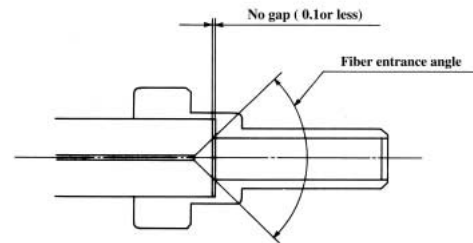
SM



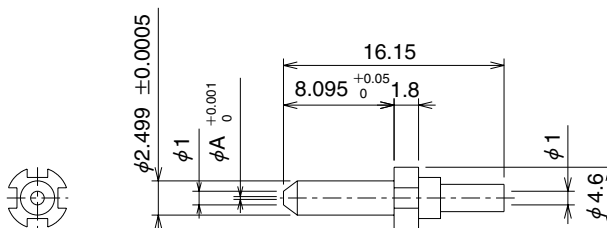
| HRS NO. | Product Number | Dimension A | Applicable Optical Fiber | Fiber Entrance Angle |
|--------------|----------------|-------------|--------------------------|----------------------|
| CL704-0068-7 | HSC-F321-A123 | 0.123 | SM-9.5/125 | 60° |
| CL704-0069-0 | HSC-F321-A124 | 0.124 | | |
| CL704-0070-9 | HSC-F321-A125 | 0.125 | | |
| CL704-0200-2 | HSC-F321-A1255 | 0.125 | | |
| CL704-0071-1 | HSC-F321-A126 | 0.126 | | |
| CL704-0072-4 | HSC-F321-A127 | 0.127 | | |
| CL704-0073-7 | HSC-F321-A128 | 0.128 | | |

NOTE: Please select a ferrule that suits the fiber diameter.

- ① The ferrules are designed without a gap at the push-on portion to reduce disconnections at the time of wiring.
- ② The entrance angle of the fiber has been set at 60° to improve the entrance of the fiber. (A 90° product is also available.)
- ③ A 4-groove type is available for single mode. This offers easier adjustment of the offset direction at time of wiring. (See diagram at right.)



APC



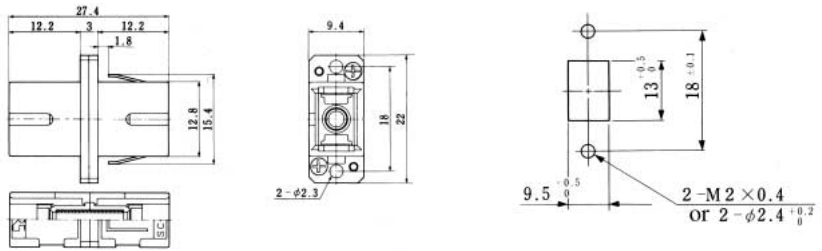
| HRS NO. | Product Number | Dimension A | Applicable Optical Fiber | Fiber Entrance Angle |
|--------------|----------------|-------------|--------------------------|----------------------|
| CL704-0371-5 | HSC-F391-A125 | 0.125 | SM-9.5/125 | 60° |
| CL704-0373-0 | HSC-F391-A126 | 0.126 | | |
| CL704-0374-3 | HSC-F391-A127 | 0.127 | | |

NOTE: Please select a ferrule that suits the fiber diameter.

Adapters Panel Mounting Type

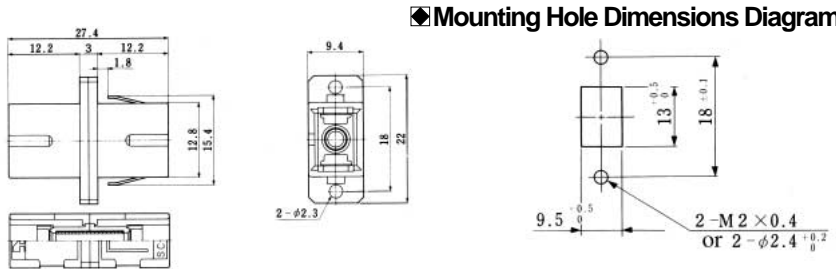
Manual Coupling / Decoupling Type

Die Cast Products



| HRS NO. | Product Number | Split Sleeve | Notes |
|-----------------|----------------|--------------|--|
| CL704-0020-0-10 | HSC-A2 (10) | Copper alloy | NTT SC corresponding items, and die cast products |
| CL704-0258-2 | HSC-A2-D1 | Zirconia | |

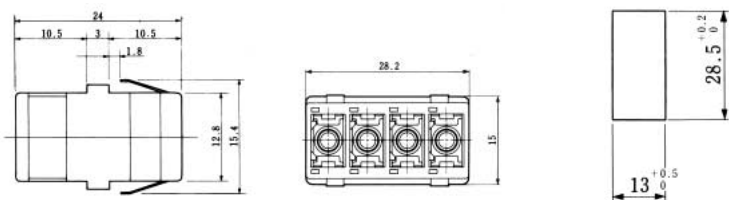
Plastic Products



| HRS NO. | Product Number | Split Sleeve | Notes |
|--------------|----------------|--------------|--|
| CL704-0092-1 | HSC-A3 | Copper alloy | NTT SC corresponding items, and die cast products |
| CL704-0217-5 | HSC-A3-D1 | Zirconia | |
| CL704-3007-9 | HSC-A3-D2 | Zirconia | Green(APC) |

Jig Coupling / Decoupling Type

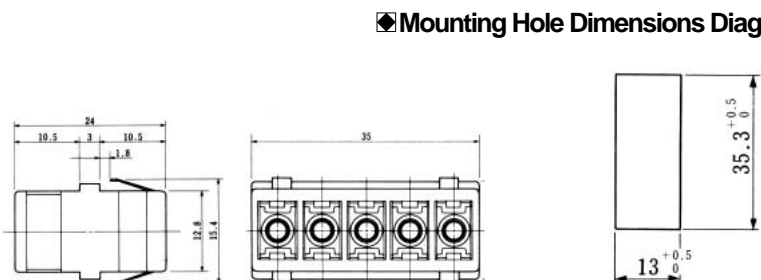
4-Ganged Type



| HRS NO. | Product Number | Split Sleeve | Notes |
|--------------|----------------|--------------|--|
| CL704-0024-1 | HSC2-4A | Copper alloy | NTT SC corresponding items, and die cast products |
| CL704-0290-5 | HSC2-4A-D1 | Zirconia | |

Jig Mounting Type

5-Ganged Type (GI)

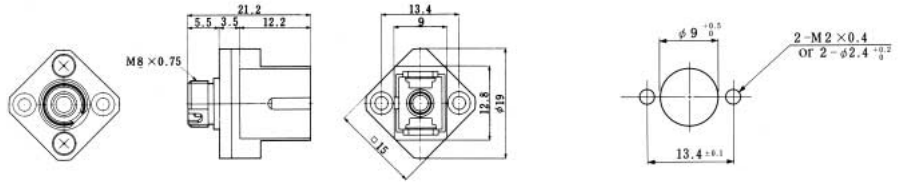


| HRS NO. | Product Number | Split Sleeve | Notes |
|--------------|----------------|--------------|--|
| CL704-0025-4 | HSC2-5A | Copper alloy | NTT SC corresponding items, and die cast products |
| CL704-0219-0 | HSC2-5A-D1 | Zirconia | |

■ Conversion Adapters

● FC Conversion Type Screw Mounting Type

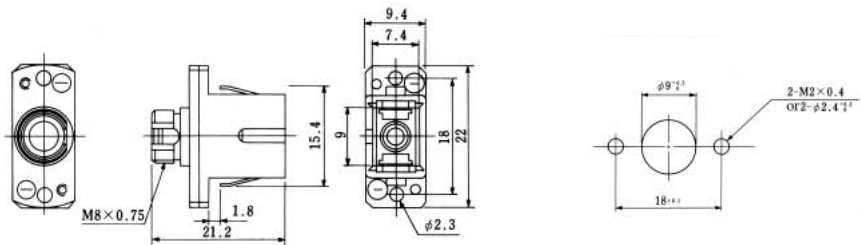
◆ Mounting Hole Dimensions Diagram



| HRS NO. | Product Number | Split Sleeve | Notes |
|--------------|----------------|--------------|-----------------------------|
| CL704-0021-3 | HSCJ-HRFCJ-B | Copper alloy | SC to FC conversion adapter |

● FC Conversion Type Screw Mounting Type

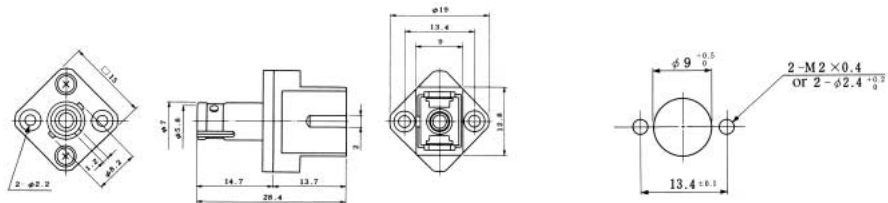
◆ Mounting Hole Dimensions Diagram



| HRS NO. | Product Number | Split Sleeve | Notes |
|--------------|----------------|--------------|-----------------------------|
| CL704-0206-9 | HSCJ-HRFCJ-C | Copper alloy | SC to FC conversion adapter |

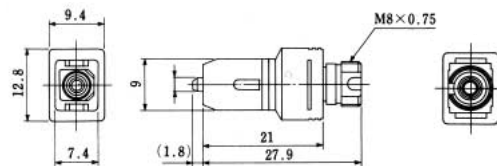
● ST Conversion Type

◆ Mounting Hole Dimensions Diagram



| HRS NO. | Product Number | Split Sleeve | Notes |
|--------------|----------------|--------------|-----------------------------|
| CL704-0102-3 | HSCJ-HSTJ-B | Copper alloy | SC to FC conversion adapter |

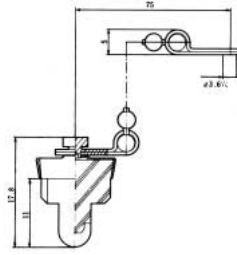
■ FC Conversion Plug



| HRS NO. | Product Number | Split Sleeve | Polishing | Optical Fiber |
|--------------|----------------|--------------|-----------|---------------|
| CL704-0203-0 | HSCP-HRFCJ-1 | Copper alloy | PC | GI 50/125 |
| CL704-0288-3 | HSCP-HRFCJ-1AS | | AdPC | |
| CL704-0204-3 | HSCP-HRFCJ-2 | | PC | SM 9.5/125 |
| CL704-0289-6 | HSCP-HRFCJ-2AS | | AdPC | |

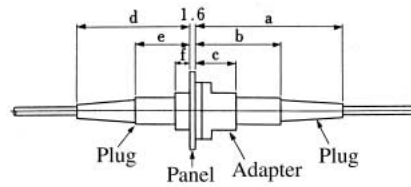
● The guide key of the SC plug end and the guide groove of the FC adapter do not necessarily match.

■ Cap



| HRS NO. | Product Number | Applicable Products |
|--------------|----------------|---|
| CL704-0061-8 | HSC-C2 | HSC-A2,HSC-A3,HSCJ-HRFCJ-B,C HSCJ-HSTJ-B,HSC-R1-B,HSC-R2-B |

◆ Mounting Dimensions Diagram



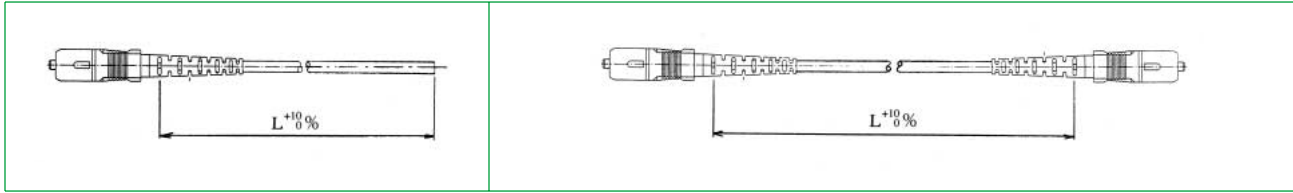
Unit : mm

| Combination | | Dimensions | | | | | |
|--|-------------|------------|------|------|------|------|------|
| Adapter | Housing | a | b | c | d | e | f |
| HSC-A2 HSC-A2-D1 HSC-A3 HSC-A3-D1 | HSC-PH2-A2 | 58 | 28 | 15.2 | 53.4 | 23.4 | 10.6 |
| | HSC-PH2-B1 | | | | | | |
| | HSC-PH2-B2 | | | | | | |
| | HSC-PH2-A2 | | | | | | |
| | HSC-PH3-B1 | | | | | | |
| | HSC-PH3-B2 | | | | | | |
| | HSC-PH2-A4 | 39.5 | 28 | 15.2 | 31.4 | 23.5 | 10.6 |
| | HSC-PH3-A4 | | | | | | |
| | HSC-PH1-A | | | | | | |
| HSC2-4A HSC2-4A-D1 HSC2-5A HSC2-5A-D1 | HSC2-PH2-A2 | 58 | — | 13.5 | 53.4 | — | 8.9 |
| | HSC2-PH2-B1 | | | | | | |
| | HSC2-PH2-B2 | | | | | | |
| | HSC2-PH3-A2 | | | | | | |
| | HSC2-PH3-B1 | | | | | | |
| | HSC2-PH3-B2 | | | | | | |
| | HSC2-PH3-A | 39.5 | — | 13.5 | 34.9 | — | 8.9 |
| | HSC2-PH1-A | | | | | | |
| HSC2-PH1-A | 36 | — | 13.5 | 31.4 | — | 8.9 | |
| HSC-R1-B | HSC-PH2-A | 57.5 | 27.5 | 14.7 | — | — | — |
| HSC-R2-B | HSC-PH3-A | | | | | | |

Note : Recommended panel thickness to be 1.6mm

■ Connectors with Cable Attached

● Manual Coupling / Decoupling Type Screw Mounting Type



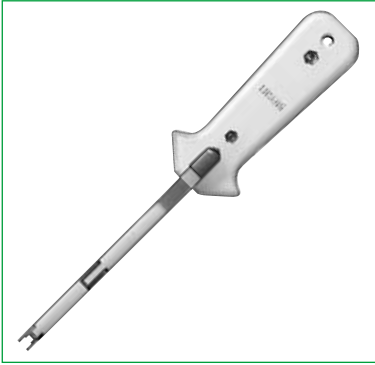
| HRS NO. | Ends with Connectors | Optical Fiber | Type of Polishing | Reflection Attenuation | Cable Diameter | Housing Used | |
|-----------------|----------------------|---------------|-------------------|--|--------------------|--------------|------------|
| HSC-SPC1-F3A-L | One end | SM-9.5/125 | PC | $\geq 22\text{dB}$ | $\phi 3$ | HSC-PH3-B1 | |
| HSC-SPC2-F3A-L | Both ends | | | | | | |
| HSC-SPC1-F3B-L | One end | GI-50/125 | PC | $\geq 22\text{dB}$ | $\phi 2$ | HSC-PH2-B1 | |
| HSC-SPC2-F3B-L | Both ends | | | | | | |
| HSC-SPC1-F3Q-L | One end | SM-9.5/125 | PC | $\geq 22\text{dB}$ | $\phi 3$ | HSC-PH3-B2 | |
| HSC-SPC2-F3Q-L | Both ends | | | | | | |
| HSC-SPC1-F3P-L | One end | GI-50/125 | PC | $\geq 22\text{dB}$ | $\phi 2$ | HSC-PH2-B1 | |
| HSC-SPC2-F3P-L | Both ends | | | | | | |
| HSC-ASPC1-F3A-L | One end | SM-9.5/125 | AdPC | $\geq 40\text{dB}$ (Low reflection) | $\phi 3$ | HSC-PH3-B2 | |
| HSC-ASPC2-F3A-L | Both ends | | | | $\phi 2$ | HSC-PH2-B2 | |
| HSC-ASPC1-F3Q-L | One end | | APC | $\geq 60\text{dB}$ (Ultra-low reflection) | $\phi 3$ | HSC-PH3-B5 | |
| HSC-ASPC2-F3Q-L | Both ends | | | | $\phi 2$ | HSC-PH2-E5 | |
| HSC-CSPR1-F3A-L | One end | SM-9.5/125 | PC | $\geq 22\text{dB}$ | $\phi 2$ | HSC-PH2-E1 | |
| HSC-CSPR2-F3A-L | Both ends | | | | | | |
| HSC-CSPE1-F3Q-L | One end | | GI-50/125 | PC | $\geq 22\text{dB}$ | $\phi 2$ | HSC-PH2-E1 |
| HSC-CSPE2-F3Q-L | Both ends | | | | | | |
| HSC-SPE1-F3Q-L | One end | SM-9.5/125 | AdPC | $\geq 40\text{dB}$ (Low reflection) | $\phi 2$ | HSC-PH2-E2 | |
| HSC-SPE2-F3Q-L | Both ends | | | | | | |
| HSC-SPE1-F3P-L | One end | GI-50/125 | APC | $\geq 60\text{dB}$ (Ultra-low reflection) | $\phi 2$ | HSC-PH2-E5 | |
| HSC-SPE2-F3P-L | Both ends | | | | | | |
| HSC-ASPE1-F3Q-L | One end | SM-9.5/125 | AdPC | $\geq 40\text{dB}$ (Low reflection) | $\phi 2$ | HSC-PH2-E2 | |
| HSC-ASPE2-F3Q-L | Both ends | | | | | | |
| HSC-TSPE1-F3Q-L | One end | | APC | $\geq 60\text{dB}$ (Ultra-low reflection) | $\phi 2$ | HSC-PH2-E5 | |
| HSC-TSPE2-F3Q-L | Both ends | | | | | | |

NOTE 1: The "L" within the Product Number indicates the length of the cable illustrated in the diagram. Please specify values in meter units.

NOTE 2: We will custom manufacture jig coupling/decoupling products other than the aforementioned items as well as a great variety of conversion cables to suit your needs.

Tools

Coupling / Decoupling Tool

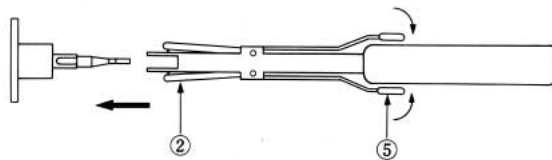


| HRS NO. | Product Number | Applicable Products |
|--------------|----------------|--|
| CL704-0286-8 | HSC-T1-L | HSC2-PH2-A2,HSC2-PH3-A2,HSC2-PH2-A, HSC2-PH3-A,HSC2-PH1-A,HSC2-PH2-B1, HSC2-PH2-B2,HSC2-PH3-B1,HSC2-PH3-B2,HSC2-PH2-E1, HSC2-PH2-E2 (PLUG),HSC2-4A,HSC2-4A-D1,HSC2-5A, HSC2-5A-D1,HSC2-8SR-1,HSC2-8SR-D1 (ADAPTER) |

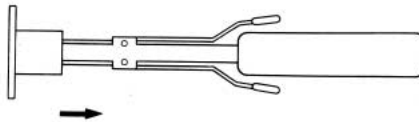
(ATTENTION) Handle carefully not to damage the top of the tool.

<Method of Operation>

1. Push lever portion of the reference diagram in the direction of the arrow. Portion will open when lever portion is lowered.



2. Insert the HSC coupling/decoupling jig into the adapter, release your hand from portion (5), and pull in the direction of the arrow. Removal is completed.



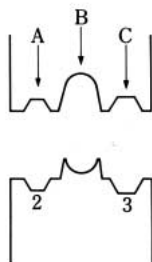
Crimping Tool



| HRS NO. | Product Number | Applicable Products |
|--------------|----------------|--|
| CL704-0287-0 | HSC-T3 | HSC-PH2-A2,HSC-PH3-A2,HSC-PH2-A4, HSC-PH3-A4,HSC2-PH2-A2,HSC2-PH3-A2, HSC2-PH2-A,HSC2-PH3-A2,HSC-PH2-A5, HSC-PH3-A5,HSC-PH2-B1,HSC-PH3-B1, HSC-PH2-B2,HSC-PH3-B2,HSC2-PH2-B1, HSC2-PH3-B1,HSC2-PH2-B2,HSC2-PH2-B2, HSC-PH2-E1,HSC-PH2-E2,HSC2-PH2-E1, HSC2-PH2-E2 |

(A crimping tool is required for cable attachment with the exception of cable housing HSC-PH1-A and HSC2-PH1-A.)

<Method of Operation>



(1) Cable jacket crimping

φ2mm cable : Use part A (The part marked "2")

φ3mm cable : Use part C (The part marked "3")

(2) Cables crimping : Use part B

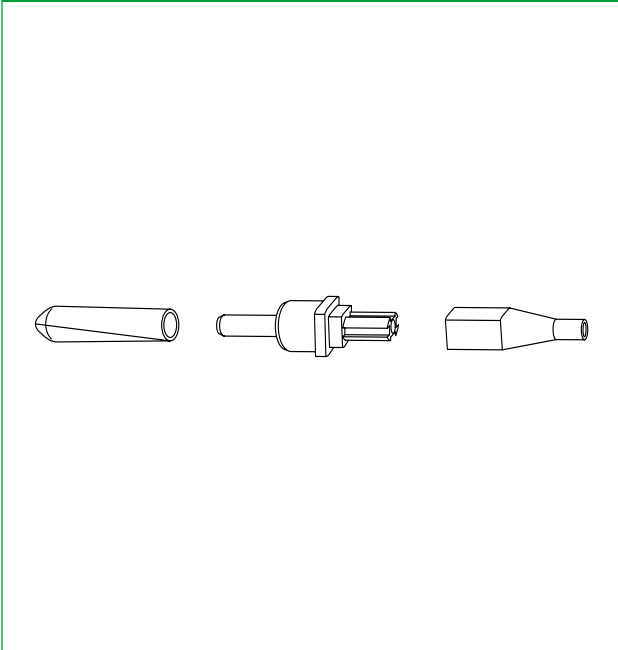
Panel Mount Receptacles

■ Features

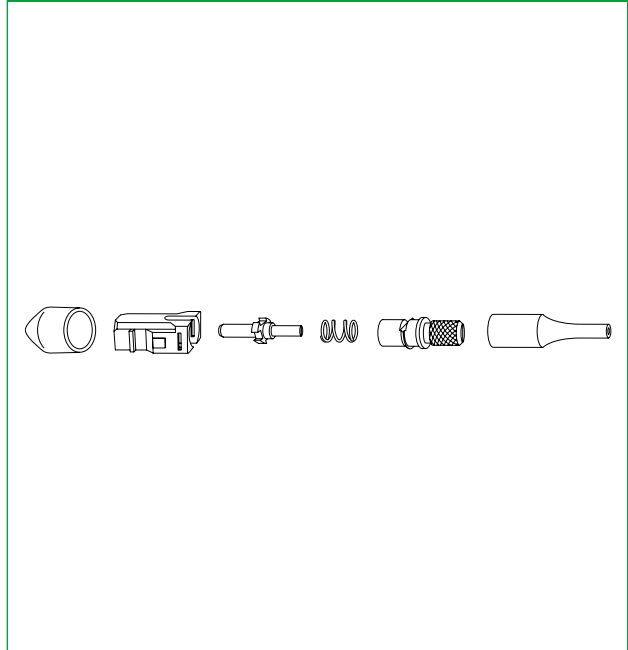
1. Low Cost

Compared with the SC(SC2) conventional adapter, this product has a greatly reduced number of components which is reflected in the new low cost.

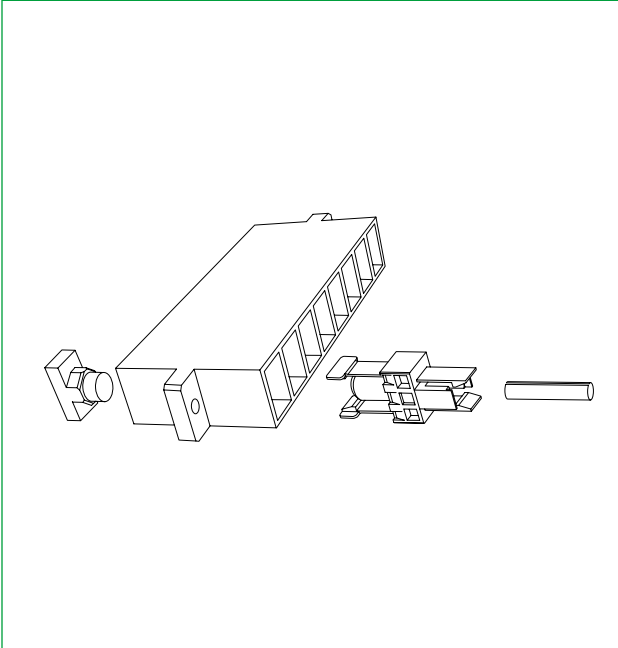
Panel Mount Plug



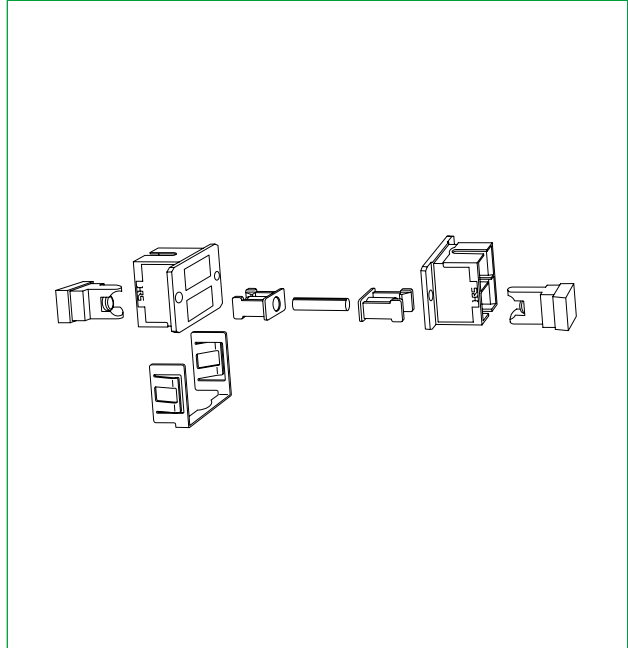
Conventional SC2 Plug



Panel Mount Receptacle



Conventional SC Adapter



2.

The wiring method for the front side of the device uses SC connectors and SC2 connectors, whereas the back side uses panel mount plugs which are of a semi-fixed coupling structure.

Note that an extraction jig is required when removing panel mount plugs.

■Product Standards

| | | | | |
|--------|-----------------------------|------------|---------------------------|------------|
| Rating | Operating temperature range | -25°C~70°C | Storage temperature range | -25°C~70°C |
|--------|-----------------------------|------------|---------------------------|------------|

| Item | | Test Method (JIS C 5961) | | Standard |
|------------------------------|--|--|--------------------------|--|
| Optical Performance | Insertion loss | (SM) | 1300nm wavelength (LD) | 0.5 dB or less (PC, AdPC) |
| | | (GI) | 1300nm wavelength (LED) | 0.3 dB or less(PC, AdPC) |
| | Reflection attenuation | (SM) | 1300/-nm wavelength (LD) | 22 dB or greater (PC) |
| | | (GI) | | 40 dB or greater (AdPC) |
| Mechanical Performance | Gauge holding force | φ2.499 ±0.0005mm zirconia gauge | | Phosphor bronze 2 to 5.9 N Zirconia 2 to 3.9 N |
| | Repetitive operation | 1,000 times | | 1) Insertion loss fluctuation after test: 0.2 dB or less 2) No damage, cracks, or component looseness |
| | Vibration resistance | Vibration range of 10 to 55 Hz, in 3-axis directions, 2 hours each | | |
| | Shock resistance | Acceleration of 981 m/s ² , in 3 directions, 10 times each (Total of 30 times) | | |
| Environmental performance | Humidity resistance (Temperature and humidity cycle) | Temperature -10°C to 65°C, humidity 90 to 96% 20 cycles | | |
| | Temperature cycle | Temperature -40°C to 75°C 42 cycles (Bellcore TR-NWT-00326) | | |
| | Heat resistance | Left for 960 hours at a temperature of 85°C | | |
| | Cold resistance | Left for 960 hours at a temperature of -25°C | | |

■Materials

●Panel Mount Receptacles

| Component | Material |
|--------------|-------------------------------------|
| Housing | Synthetic resin |
| Sleeve | Synthetic resin |
| Split sleeve | Phosphor bronze or zirconia |
| Plate | Stainless steel |
| Cap | Synthetic rubber or Synthetic resin |

●Panel Mount Plugs

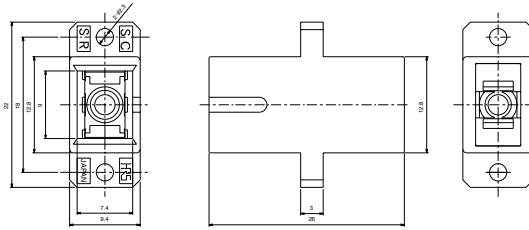
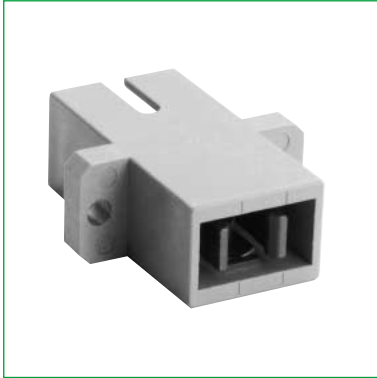
| Component | Material |
|-------------|------------------------------|
| Ferrule | Zirconia and synthetic resin |
| Boot | Synthetic rubber |
| Ferrule cap | Polyethylene |

●Panel Mount Plug Extraction Tool

| Product Name | Material |
|----------------|-----------------|
| Extraction jig | Synthetic resin |

■Panel Mount Receptacles(Manual Coupling/Decoupling Type)

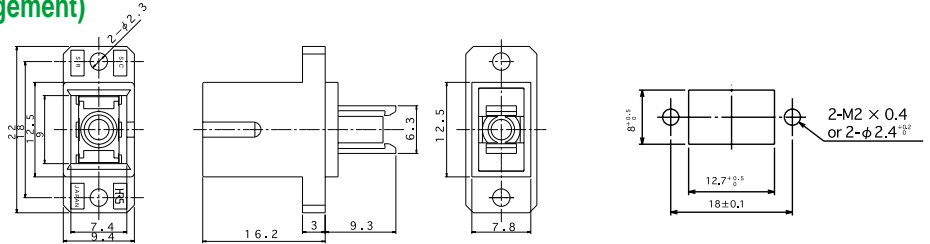
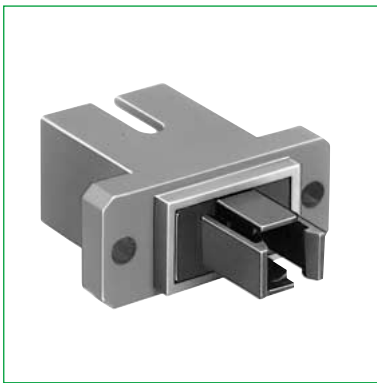
●SC Simplex



| HRS NO. | Product Number | Split Sleeve |
|-----------------|----------------|--------------|
| CL704-0320-4 | HSC-SR-1 | Copper alloy |
| CL704-0321-7 | HSC-SR-D1 | Zirconia |
| CL704-0320-4-01 | HSC-SR-1(01) | — |

◆Mounting Hole Dimensions Diagram

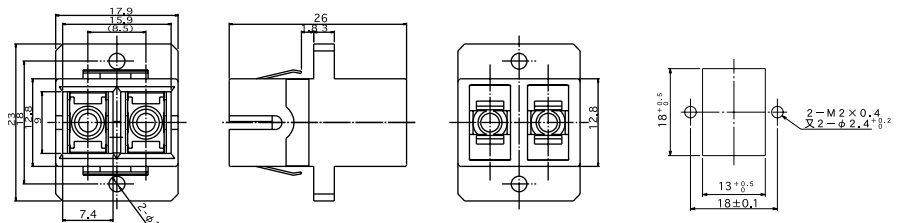
●SC Duplex H-type (R-type Key Arrangement)



| HRS NO. | Product Number | Split Sleeve |
|-----------------|----------------|--------------|
| CL704-0291-8 | HSC-SR-2 | Copper alloy |
| CL704-0292-0 | HSC-SR-D2 | Zirconia |
| CL704-0291-8-01 | HSC-SR-2(01) | — |

◆Mounting Hole Dimensions Diagram

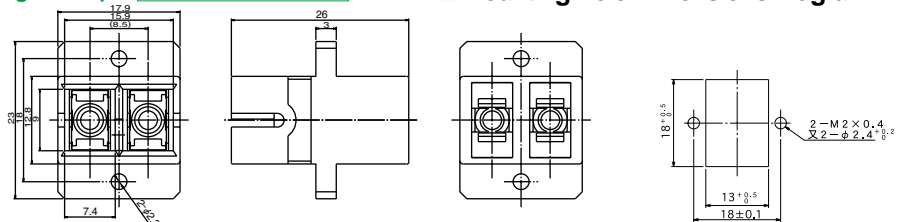
●SC Duplex H-type(R-type Key Arrangement)



| HRS NO. | Product Number | Split Sleeve |
|-----------------|--------------------|--------------|
| CL704-0293-3 | HSCH-2SR-1(R) | Copper alloy |
| CL704-0294-6 | HSCH-2SR-D1(R) | Zirconia |
| CL704-0293-3-01 | HSCH-2SR-1(R) (01) | — |

◆Mounting Hole Dimensions Diagram

●SC Duplex F-type(P-type Key Arrangement) Without Plate



| HRS NO. | Product Number | Split Sleeve |
|-----------------|--------------------|--------------|
| CL704-0300-7 | HSCH-2SR-3(R) | Copper alloy |
| CL704-0301-0 | HSCH-2SR-D3(R) | Zirconia |
| CL704-0300-7-01 | HSCH-2SR-3(R) (01) | — |