

Sam Woo Electronics General Catalogue

Edition 9

Connector, Antenna and Cable Assembly



Circular

SCC SCN/SCK SH SM SN SP SPP SR IP67 SRC ST ST IP67
SU SU2/SU3 SW SW IP67 SXR

RF / Microwave

SB STE SMA SMB MCX MMCX BNCCHD BNC75Ω BNC50Ω MRF D-TAP
POWER PIN Micro USB IP67 Cable Assembly

Antenna

SMA TNC BNC



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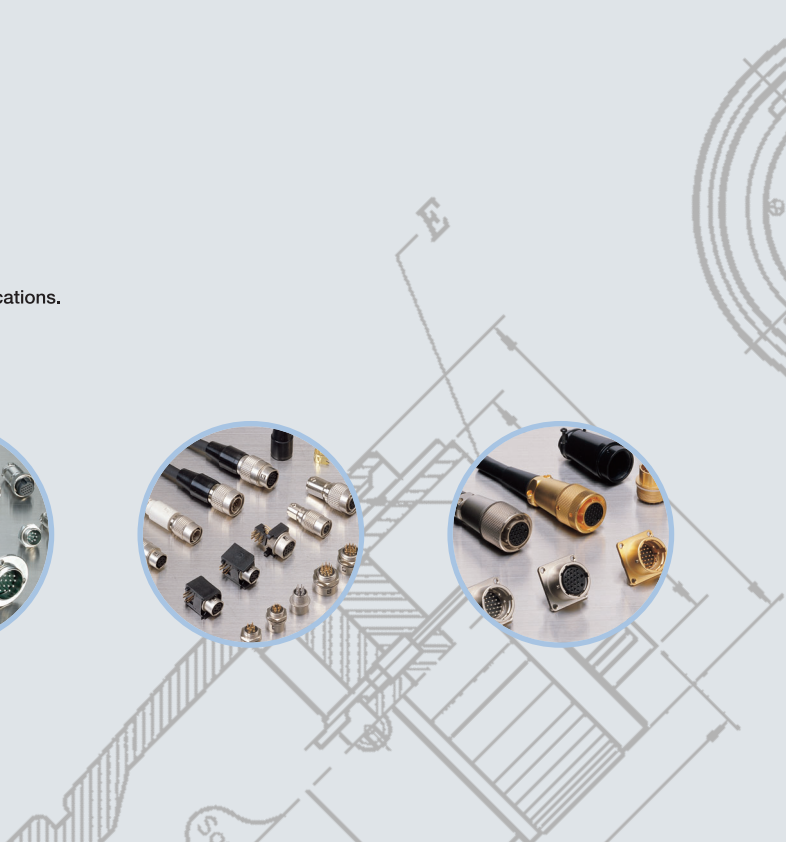
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All dimensions are in millimeters.
Specifications subject to change without notice.
Consult Sam Woo Electronics for the latest specifications.

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About Sam Woo

Sam Woo Electronics Co., Ltd is a manufacturer of circular connectors, antennas and cable assemblies for Broadcasting audio/Video Unit, Security/Surveillance Camera, Medical Equipment, Factory Automation and General Industrial Applications. Sam Woo Electronics Co., Ltd, established in 1981, has been growing and expanding into the international market with a conscious effort to provide quick response for standard as well as customized connections. Our network to US, Hong Kong, Japan, France, England and Spain. We are about maintaining good relations with our current/potential clients who share common growth values and business ethics through the delivery of quality products.

Mission

Connecting the world

Vision

Developing a Healthy Community

Core Value

Empowerment through Transformation and Growth

Certificate

| | |
|-----------------------------|------------------------------|
| System Certificate | ISO 9001, ISO14001, ISO13485 |
| Environment Compliance | RoHS, PFOS, REACH |
| Product Quality Certificate | UL, CE |

Brief History

- 2016 Completed "Smart Factory Business" with Sam Sung Electronics.
- 2015 Completed "Industry Innovation Movement 3.0" from a Korea Chamber of Commerce & Industry
- 2014 Selected as a "Woman-friendly Enterprises" by Shiheung Province
- 2014 Selected as a "Best Job Enterprises" by Gyeonggi Province
- 2013 Acquired Eco-Partner Certificate with Samsung Electronics Co., Ltd.
- 2012 Established Cable Assembly department and acquired ISO9001 and ISO14001
- 2012 Acquired ISO13485 Certificate
- 2011 Selected as Gyeonggi Internet Trade Frontier Business

- 2008 Selected as a INNO-BIZ from Small & Medium Business Administration
- 2008 Selected as a member of Gyeonggi Venture Business Association(GIVA)
- 2008 Acquired UL Certificate (E 312221)
- 2006 Established partnership with E-valucon HK
- 2005 Received LG Eco Partner Certificate
- 2005 RoHS Regulation Compliance applied to all exporting items
- 2004 Adopted ERP System
- 2003 Acquired KSA14001 / ISO14001 Certificates
- 2003 Selected as a "Promising Small & Medium - Size Enterprises 2003" by Gyeonggi Province
- 2003 Registered "R&D Center" (No. 20031233) certified Korea Industrial Technology Association (KITA)
- 2003 Acquired UL Certificate (E234985)
- 2002 Awarded "Government Support Program for Exporting Enterprises" for three consecutive years
- 2002 Established partnership with Trust Components, Ltd. (Japan) and E-valucon, Inc. (USA)
- 2000 Issued patent for SIM card connector

- 1999 Constructed a new plant in Shihwa Industrial Complex, South Korea
- 1997 Acquired KSA9001/ISO9001 Certifications
- 1994 Issued 20 patents for cable TV connector

- 1981 Established

Circular Connectors

SCC
 SCN/SCK
 SH
 SM
 SN
 SP
 SPP
 SR IP67
 SRC
 ST
 ST IP67
 SU IP67
 SU2 / SU3 IP67
 SW
 SW IP67
 SXR

RF / Microwave

Triaxial 75 Ω

SB

Stereo Plug

STE

Miniature

SMA
 SMB
 MCX
 MMCX

BNCCHD

BNC75 Ω

BNC50 Ω

N

M

TNC

Others

MRF

D-tap

POWER PIN

MICRO USB IP67 Cable Assembly

Antenna

Between-Series Adapter

Custom Band

SMA

TNC

Circular Connectors

| | |
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| SW IP67 | 134 |
| SXR | 142 |

Circular Selection Guide

■ Selection by Size / Contacts / Current

Select shell diameter, number of contacts, and current rating, then go to the indicated page for details on the product.

| series | contacts | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 14 | 16 | 18 | 19 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | |
|-----------------|----------|------------|----------|------------|-----------|-----------|-----------|----------|---------|----------|-------------|---------|----------|----|---------|---------|----|----|-------------|----|---------|-----------|--|
| | size | | | | | | | | | | | | | | | | | | | | | | |
| SCC | 13 | | ● 10A | | ● 5A | | | | | | | | | | | | | | | | | | |
| | 16 | | | | | | ● 10A | ● 5A | | ● 5A | | | | | | | | | | | | | |
| | 21 | | ● 20A | ● 15A | | | | | | ● 10A | | | ● 5A | | | | | | | | | | |
| | 25 | | | | | | | | | | | | ● 10A | | | | | | ● 5A | | | | |
| SCN & SCK | 12 | ● 4A,3A | | ● 4A,3A | | | | | | | | | | | | | | | | | | | |
| | 16 | ● 5A | ● 5A | ● 5A | ● 4A | ● 3A | ● 3A | ● 3A | | | | | | | | | | | | | | | |
| | 20 | ● 7A | ● 7A | ● 7A | ● 7A | ● 4A | | ● 3A | | ● 3A | | | | | | ● 2A | | | | | | | |
| | 25 | ● 10A | ● 10A | ● 10A | ● 10A | ● 4A | | ● 4A | | ● 4A | ● 4A | | | | | | | | | | | | |
| SCK | 30 | ● 15A | ● 15A | ● 15A | | ● 15A | | ● 15A | | ● 5A | | ● 4A | | | | | | | | | | | |
| | 32 | ● 30A | ● 30A | ● 30A | | | | | | | | | | | | | | | | | | | |
| | 40 | ● 40A | ● 40A | ● 40A | | | | | | | ● 10A,4A | | | | | | | | | | | | |
| SH | 9 | | | | | ● 2A | | | | | | | | | | | | | | | | | |
| SM | 9 | | | | | | | ● 2A | | | | | | | | | | | | | | | |
| SN | 8 | | | ● 2A | ● 2A | ● 2A | | | | | | | | | | | | | | | | | |
| | 10 | ● 3A | ● 3A | ● 3A | | | | | ● 2A | ● 2A | ● 2A | | | | | | | | | | | | |
| SP | 00 | ● 5A | ● 3A | ● 2A | | | | | | | | | | | | | | | | | | | |
| | 0 | ● 10A | ● 8A | ● 7A | ● 6.5A | ● 2.5A | ● 2.5A | | ● 2A | | | | | | | | | | | | | | |
| | 1 | ● 15A | ● 12A | ● 10A | ● 9A | ● 7A | ● 7A | ● 5A | | | | ● 2A | | | | | | | | | | | |
| | 2 | | | | | | | ● 10A | | ● 8A | | | | | | | | | | | | | |
| | 3 | | | | | | | | | | | | | | | | | | | | | ● 3.5A | |
| SPP | 1 | ● 10A | | ● 8A | ● 7A | ● 6A | ● 5A | ● 5A | | ● 3A | | | | | | | | | | | | | |
| SR IP67 | 8 | | | ● 3A | | | | | | | | | | | | | | | | | | | |
| SRC | 21 | | | | | | | | | ● 10A | | | ● 5A | | | | | | ● 10A,5A | | | | |
| ST | 8 | | | | | | | | | | | ● 1A | | | | | | | | | | | |
| | 9 | | | | | | | | | | ● 1A | | ● 1A | | | ● 1A | | | | | | | |
| | 9A | | | | | | | | | | ● 1A | | ● 1A | | | ● 1A | | | | | | | |
| ST IP67 | 9 | | | | | | | | | ● 1A | | ● 1A | | | ● 1A | | | | | | | | |
| SU/SU2/SU3 | 20 | | ● 5A | ● 5A | ● 5A | ● 5A | | ● 5A | | ● 3A | ● 3A | | | | | | | | | | | | |
| SW / SW IP67 | 8 | | | ● 2A | ● 2A | ● 2A | | | | | | | | | | | | | | | | | |
| | 10 | ● 3A | ● 3A | ● 3A | | | | | ● 2A | ● 2A | ● 2A | | | | | | | | | | | | |
| SW IP67 | 16 | | | | | | | | | | | | | | | | | | | | ● 2A | | |
| SXR | 10 | | | | | | | ● 2A | | | | | | | | | | | | | | | |
| series | size | | | | | | | | | | | | | | | | | | | | | | |
| | contacts | | | | | | | | | | | | | | | | | | | | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Application

Find application type. Check the available sizes and contact numbers. Then go to the indicated page for details on the product.

| Application | Product Series | Available Size | No. of Contacts |
|--------------------------------|----------------|----------------------|---------------------------|
| Audio/Video | SN | 8,10 | 2,3,4,5,6,9,10,12 |
| | SRC | 21 | 10,16,26 |
| | ST | 8,8B,9 | 12,14,16,20 |
| CCTV | SN | 8,10 | 2,3,4,5,6,9,10,12 |
| Communication | SCN/SCK | 12,16,20,25,30,32,40 | 2,3,4,5,6,7,8,10,12,14,20 |
| Computers & Peripherals | SN | 8,10 | 2,3,4,5,6,9,10,12 |
| Control Engineering | SU | 20 | 3,4,5,6,8,12,14 |
| Electric / Electronic | SCN/SCK | 12,16,20,25,30,32,40 | 2,3,4,5,6,7,8,10,12,14,20 |
| Electronic Precision Equipment | SU | 20 | 3,4,5,6,8,12,14 |
| Factory Automation | SN | 8,10 | 2,3,4,5,6,9,10,12 |
| | SRC | 21 | 10,16,26 |
| | ST | 8,8B,9 | 12,14,16,20 |
| HDTV | SP | 00,0,1,2,3 | multiple contacts |
| Industrial | SCC | 13,16,21,25 | 3,4,5,7,8,10,16,24 |
| Measuring Equipment | SN | 8,10 | 2,3,4,5,6,9,10,12 |
| | SRC | 21 | 10,16,26 |
| | ST | 8,8B,9 | 12,14,16,20 |
| Medical Unit | SN | 8,10 | 2,3,4,5,6,9,10,12 |
| | SP | 00,0,1,2,3 | multiple contacts |
| | SRC | 21 | 10,16,26 |
| | ST | 8,8B,9 | 12,14,16,20 |
| | SU | 20 | 3,4,5,6,8,12,14 |
| | SH | 9 | 6 |
| Microphone | SH | 9 | 6 |
| Optical Testing | SP | 00,0,1,2,3 | multiple contacts |
| Portable Wireless Radio | SN | 8,10 | 2,3,4,5,6,9,10,12 |
| | SP | 00,0,1,2,3 | multiple contacts |
| Precision Equipment | SU | 20 | 3,4,5,6,8,12,14 |
| Professional Audio | SN | 8,10 | 2,3,4,5,6,9,10,12 |
| | SP | 00,0,1,2,3 | multiple contacts |
| | SRC | 21 | 10,16,26 |
| | ST | 8,8B,9 | 12,14,16,20 |
| Professional Video | SN | 8,10 | 2,3,4,5,6,9,10,12 |
| | SP | 00,0,1,2,3 | multiple contacts |
| | SRC | 21 | 10,16,26 |
| | ST | 8,8B,9 | 12,14,16,20 |
| Robotics | ST | 8,8B,9 | 12,14,16,20 |
| Sensor | ST | 8,8B,9 | 12,14,16,20 |
| Telecommunication | SP | 00,0,1,2,3 | multiple contacts |
| Vision Testing | SP | 00,0,1,2,3 | multiple contacts |
| | SRC | 21 | 10,16,26 |
| Wireless Communication | SH | 9 | 6 |
| Wireless Radio | SN | 8,10 | 2,3,4,5,6,9,10,12 |
| | SP | 00,0,1,2,3 | multiple contacts |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SCC Series

P.12



Size / No. of Contacts

Size - 13,16,21,25
Contacts - 3,4,5,7,8,10,16,24

Material / Finish

Body - Aluminum alloy / Ni plating
Insulator - Thermosetting resin / Blue,
Green
Contacts - Copper alloy / Silver plating

Applications

Industrial

Features

Rugged
Light weight
Low cost
General purpose

SCK / SCN Series

P.16



Size / No. of Contacts

SCN Size - 12,16,20,25
SCK Size - 12,16,20,25,30,32,40
Contacts - 2,3,4,5,6,7,8,10,12,14,20

Material / Finish

Body - Zinc alloy / Ni plating
Insulator - PA & Bakelite / Green & Black
Contacts - Brass, Phosphor Bronze /
Silver or Gold plating

Applications

Electric & Electronic
Communication

Features

Rugged
Simple construction
Stable performance

SH Series

P.30



Size / No. of Contacts

Size - 9
Contacts - 6

Material / Finish

Body - Brass / Chromium plating
Insulator - Glass filled polyacetal / White
Contacts - Brass, Phosphor Bronze /
Gold plating

Applications

Microphone Circuitry
Wireless Communication

Features

Compact
Durable
Contemporary design

SM Series

P.34



Size / No. of Contacts

Size - 9
Contacts - 8

Material / Finish

Body - Brass / Ni plating
Insulator - PA / Black, Ivory
Contacts - Brass, Phosphor Bronze /
Gold plating

Applications

Professional Audio and Camera,
CCTV, Medical, Wireless Radio,
Factory Automation, Computers, etc.

Features

Miniature circular
High durability / reliability
Light weight

SN Series

P.40



Size / No. of Contacts

Size - 8,10
Contacts - 2,3,4,5,6,9,10,12

Material / Finish

Body - Zinc alloy and Brass / Ni Plating
Insulator - PA / Black
Contacts - Brass, Phosphor Bronze / Silver or Gold Plating

Applications

Professional A/V, CCTV, Medical, Wireless Radio, Measuring, Computers and Peripherals, Factory Automation, etc.

Features

Push-pull, Light-weight
Miniature circular, Low cost

SP Series

P.52



Size / No. of Contacts

Size - 00,0,1,2,3
Contacts - multiple

Material / Finish

Body - Brass / Chromium Plating
Insulator - PEEK, PA or Teflon
Contacts - Brass / Gold Plating

Applications

Telecommunication, HDTV, Professional A/V, Optical Testing, Vision Testing, Portable Wireless Radio, Medical, etc.

Features

Ultimate performance
Aerodynamic and aesthetic

SPP Series

P.68



Size / No. of Contacts

Size - 1
Contacts - multiple

Material / Finish

Body-PSU, PEI, PC
Insulator - PEEK, PA
Contacts - Brass / Gold Plating

Applications

Medical electronics
Test and measurement
Industrial electronics
Automotive

Features

User friendly and robust
Secure multi-contact push-pull mechanism

SR IP67 Series

P.78



Size / No. of Contacts

Size - 8
Contacts - 4

Material / Finish

Cap - Brass / Ni Plating
Insulator - PBT / Black
Outer sheath - PVC / Black
Contacts - Brass, Phosphor Bronze / Silver or Gold Plating

Applications

Factory Automation and Sensors, Process control, Industrial instrumentation, Commercial electronics

Features

M12 threaded locking
Protection rating of IP67 with overmoding

SRC Series

P.82



Bayonet

Size / No. of Contacts

Size - 21
Contacts - 10,16,26

Material / Finish

Body - Aluminum alloy / Ni plating
Insulator - Thermosetting resin / Black or Blue
Contacts - Brass, Phosphor Bronze/Gold or Silver plating

Applications

Professional A/V, Vision Testing, Factory Automation, Measuring, Medical, etc.

Features

Bayonet locking system
Rugged, Light-weight, Low cost
General purpose

ST Series

P.88



Size / No. of Contacts

Size - 8,8B,9, 9A
Contacts - 12,14,16,20

Material / Finish

Body - Brass & Zinc alloy / Ni plating
Insulator - PPS resin / Black
Contacts - Brass, Phosphor Bronze / Gold plating

Applications

Professional A/V
Measuring
Sensors
Wireless Radio
Medical, etc.

Features

Super-miniature with multi-contact
Safe insert system

ST IP67 Series

P.100



Size / No. of Contacts

Size - 9
Contacts - 12,16,20

Material / Finish

Body - Brass & Zinc alloy / Ni plating
Insulator - PPS resin / Black
Contacts - Brass, Phosphor Bronze / Gold plating

Applications

Professional A/V
Measuring
Sensors
Wireless Radio
Medical, etc.

Features

Super-miniature with multi-contact
Safe insert system
Waterproof(IP67) with overmolding

SU IP67 Series

P.108



Size / No. of Contacts

Size - 20
Contacts - 3,4,5,6,8,A5,12,14

Material / Finish

Body - Zinc Alloy / Ni plating
Insulator - PA / Black
Contacts - Brass, Phosphor Bronze / Gold plating

Applications

Electronic Precision Equipment
Control Engineering
Automation
Medical

Features

Waterproof(IP67)
Electro-magnetic protection

SU2 / SU3 IP67 Series P.122



Size / No. of Contacts

Size - 20
Contacts - 3,4,5,6,8,A5,12,14

Material / Finish

Body - Zinc Alloy, Brass
Insulator - PA
Contacts - Brass, Phosphor Bronze

Applications

CCU (Central Control Unit)
Smart Bias Tee, Junction Box
Lightening Protection Unit
RET Control Cable
RCU (Remote Control Unit)
Power Signal Splitter
General Industrial

Features

Safe Connection / Easy Mounting

SW Series P.128



Size / No. of Contacts

Size - 8,10
Contacts - 2,3,4,5,6,9,10,12

Material / Finish

Body - Brass / Ni plating
Insulator - PA / Black
Contacts - Brass, Phosphor Bronze / Silver
or Gold Plating

Applications

Professional Audio and Camera,
CCTV, Medical, Wireless Radio,
Testing & Measuring Equipment, etc.

Features

Excellent performance at low price
Screw mounting
Super-miniature with multi-contact
Precise design

SW IP67 Series P.134



Size / No. of Contacts

Size - 8,10,16
Contacts - 2,3,4,5,6,9,10,12,28

Material / Finish

Body - Brass / Ni plating
Insulator - PA / Black
Contacts - Brass, Phosphor Bronze / Silver
or Gold Plating

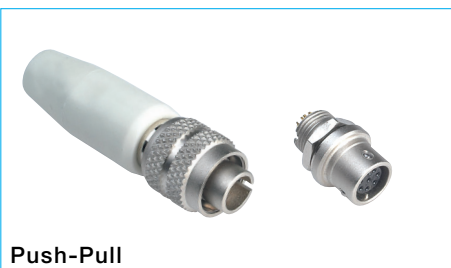
Applications

Professional Audio and Camera,
CCTV, Medical, Wireless Radio,
Testing & Measuring Equipment, etc.

Features

Excellent performance at low cost
Screw mounting
Super-miniature with multi-contact
Precise design
Protection rating of IP67 with overmolding

SXR Series P.142



Push-Pull

Size / No. of Contacts

Size - 10
Contacts - 8

Material / Finish

Body - Aluminum alloy / Ni plating
Insulator - PBT resin / Black
Contacts - Brass, Phosphor Bronze /
Gold plating

Applications

Professional Audio and Camera

Features

Miniature, Light weight,
Ground function

SCC Series Part Numbering



Features

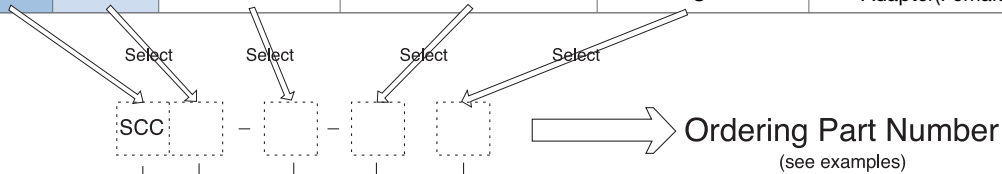
- Rugged
- Light weight
- Low cost
- General purpose

Applications

- Industrial

Part Numbering

| Product Number | | Size | Number of Contacts | Suffix (Contact Type) | Notes |
|----------------|------------------|-------------|---|--------------------------|--------------------|
| Series | Prefix (Body) | | | | |
| SCC | 6A | 13,16,21,25 | 13 size : 3,5 16 size : 7,8,10 21 size : 3,4,10,16 25 size : 16,24 | P | Plug(Male) |
| | | | | S | Plug(Female) |
| | 2A | | | P | Receptacle(Male) |
| | | | | S | Receptacle(Female) |
| | 1A | | | P | Adapter(Male) |
| | | | | S | Adapter(Female) |



Connector Series (Body Type)

- SCC6A - Plug
- SCC2A - Receptacle
- SCC1A - Adapter

Size

13,16,21,25

No. of Contacts

- 13 Size : 3,5
- 16 Size : 7,8,10
- 21 Size : 3,4,10,16
- 25 Size : 16,24

Contact Type

- P : Male
- S : Female

Examples

SCC6A - 13 - 3P
SCC Series Plug - Size 13 - 3 Male Contacts

SCC2A - 16 - 10S
SCC Series Receptacle - Size 16 - 10 Female Contacts

SCC1A - 25 - 24P
SCC Series Adapter - Size 25 - 24 Male Contacts

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

■ Major Performances / Contact Arrangements

| Performance | Size 13 | | Size 16 | | |
|--|----------------|----------------|----------------|----------------|----------------|
| | 3 | 5 | 7 | 8 | 10 |
| Withstanding Voltage (per min) ¹ | AC 1500V, 1min | AC 1000V, 1min | AC 1000V, 1min | AC 1000V, 1min | AC 1000V, 1min |
| Current | 10A | 5A | 10A | 5A | 5A |
| Insulation Resistance (Minimum) ² | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω |
| Contact Resistance (Maximum) ³ | 5m Ω | 5m Ω | 5m Ω | 5m Ω | 5m Ω |
| Solder Pot Inside Diameter (φ) | 1.5 | 1.0 | 1.5 | 1.0 | 1.0 |
| Wire Gauge (Maximum) | AWG18 | AWG20 | AWG18 | AWG20 | AWG20 |
| Contact Arrangement | | | | | |

| Performance | Size 21 | | | | Size 25 | |
|--|------------------------------|------------------------------|----------------|----------------|---------------|---------------|
| | 3 | 4 | 10 | 16 | 16 | 24 |
| Withstanding Voltage (per min) ¹ | AC 1500V, 1min | AC 1500V, 1min | AC 1000V, 1min | AC 1000V, 1min | AC 500V, 1min | AC 500V, 1min |
| Current | 20A | 15A | 10A | 5A | 10A | 5A |
| Insulation Resistance (Minimum) ² | more than 1000M Ω at DC 500V | more than 1000M Ω at DC 500V | 1,000M Ω | 1,000M Ω | 500M Ω | 500M Ω |
| Contact Resistance (Maximum) ³ | 5m Ω | 5m Ω | 5m Ω | 5m Ω | 5m Ω | 5m Ω |
| Solder Pot Inside Diameter (φ) | 2.7 | 2.2 | 1.5 | 1.0 | 1.5 | 1.0 |
| Wire Gauge (Maximum) | AWG12 | AWG14 | AWG18 | AWG20 | AWG18 | AWG20 |
| Contact Arrangement | | | | | | |

¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
 • Specifications subject to change without notice.
 • Consult Sam Woo Electronics for the latest specifications.
⁴ Connector contact arrangement is from mating surface.

■ Material Used / Finish

| | Material | Finish |
|-----------|---------------------|-----------------------|
| Body | Aluminum alloy | Ni Plating |
| Insulator | Thermosetting resin | UL94V-0 ; Blue, Green |
| Contacts | Male | Copper alloy |
| | Female | Copper alloy |

■ Mating & Unmating Force

| Shell Size | Contacts | Force | Shell Size | Contacts | Force |
|------------|----------|---------|------------|----------|---------|
| 13 | 3 | < 1.4Kg | 13 | 5 | < 1.5Kg |
| 16 | 7 | < 3.2Kg | 16 | 10 | < 3.4Kg |
| 21 | 10 | < 4.5Kg | 21 | 16 | < 5.5Kg |
| 25 | 16 | < 7.2Kg | 25 | 24 | < 8.2Kg |

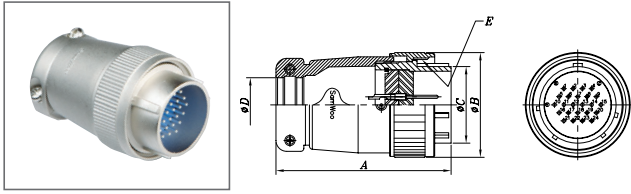
■ SCC Series Mini-map



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

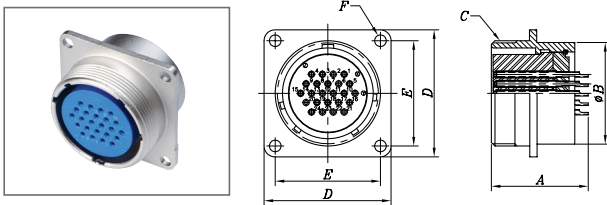
SCC Series Male / Female Plug, Receptacle, Adapter

■ SCC6A Plug



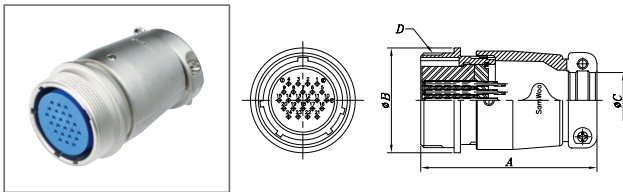
| Product Number | A | ∅ B | ∅ C | ∅ D | E |
|----------------|------|------|------|------|----------|
| SCC6A-13- 3P | 45,7 | 21,5 | 12,7 | 8,0 | M18×1,0P |
| SCC6A-13- 5P | | | | | |
| SCC6A-16- 7P | | | | | |
| SCC6A-16- 8P | 48,0 | 25,5 | 16,3 | 11,5 | M22×1,0P |
| SCC6A-16-10P | | | | | |
| SCC6A-21- 3P | | | | | |
| SCC6A-21- 4P | 53,5 | 29,7 | 20,5 | 14,0 | M26×1,0P |
| SCC6A-21-10P | | | | | |
| SCC6A-21-16P | | | | | |
| SCC6A-25-16P | 56,5 | 33,8 | 24,7 | 17,5 | M30×1,0P |
| SCC6A-25-24P | | | | | |

■ SCC2A Receptacle

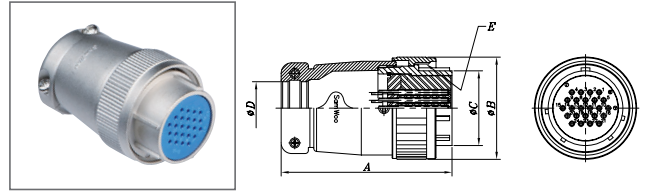


| Product Number | A | ∅ B | C | D | E | F |
|----------------|------|------|----------|------|------|---------|
| SCC2A-13- 3S | 27,8 | 16,0 | M18×1,0P | 26,0 | 20,0 | 4-∅ 3,2 |
| SCC2A-13- 5S | 26,5 | | | | | |
| SCC2A-16- 7S | 27,6 | | | | | |
| SCC2A-16- 8S | 27,6 | 19,8 | M22×1,0P | 29,0 | 23,0 | 4-∅ 3,2 |
| SCC2A-16-10S | 27,0 | | | | | |
| SCC2A-21- 3S | 31,1 | | | | | |
| SCC2A-21- 4S | 29,4 | 24,0 | M26×1,0P | 32,0 | 26,0 | 4-∅ 3,3 |
| SCC2A-21-10S | 27,1 | | | | | |
| SCC2A-21-16S | 26,6 | | | | | |
| SCC2A-25-16S | 27,3 | 27,9 | M30×1,0P | 35,0 | 29,5 | 4-∅ 3,3 |
| SCC2A-25-24S | 26,7 | | | | | |

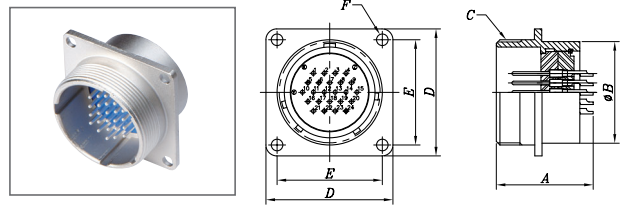
■ SCC1A Adapter



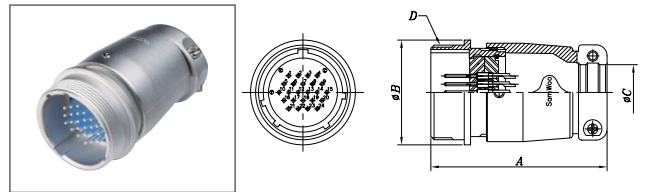
| Product Number | A | ∅ B | ∅ C | D |
|----------------|------|------|------|----------|
| SCC1A-13- 3S | 45,0 | 21,0 | 8,0 | M18×1,0P |
| SCC1A-13- 5S | | | | |
| SCC1A-16- 7S | | | | |
| SCC1A-16- 8S | 47,8 | 25,0 | 11,5 | M22×1,0P |
| SCC1A-16-10S | | | | |
| SCC1A-21- 3S | | | | |
| SCC1A-21- 4S | 51,5 | 29,0 | 14,0 | M26×1,0P |
| SCC1A-21-10S | | | | |
| SCC1A-21-16S | | | | |
| SCC1A-25-16S | 55,5 | 33,0 | 17,5 | M30×1,0P |
| SCC1A-25-24S | | | | |



| Product Number | A | ∅ B | ∅ C | ∅ D | E |
|----------------|------|------|------|------|----------|
| SCC6A-13- 3S | 45,7 | 21,5 | 12,7 | 8,0 | M18×1,0P |
| SCC6A-13- 5S | | | | | |
| SCC6A-16- 7S | | | | | |
| SCC6A-16- 8S | 48,0 | 25,5 | 16,3 | 11,5 | M22×1,0P |
| SCC6A-16-10S | | | | | |
| SCC6A-21- 3S | | | | | |
| SCC6A-21- 4S | 53,5 | 29,7 | 20,5 | 14,0 | M26×1,0P |
| SCC6A-21-10S | | | | | |
| SCC6A-21-16S | | | | | |
| SCC6A-25-16S | 56,5 | 33,8 | 24,7 | 17,5 | M30×1,0P |
| SCC6A-25-24S | | | | | |



| Product Number | A | ∅ B | C | D | E | F |
|----------------|------|------|----------|------|------|---------|
| SCC2A-13- 3P | 26,5 | 16,0 | M18×1,0P | 26,0 | 20,0 | 4-∅ 3,2 |
| SCC2A-13- 5P | | | | | | |
| SCC2A-16- 7P | | | | | | |
| SCC2A-16- 8P | 26,5 | 19,8 | M22×1,0P | 29,0 | 23,0 | 4-∅ 3,2 |
| SCC2A-16-10P | | | | | | |
| SCC2A-21- 3P | | | | | | |
| SCC2A-21- 4P | 30,9 | 24,0 | M26×1,0P | 32,0 | 26,0 | 4-∅ 3,3 |
| SCC2A-21-10P | 29,4 | | | | | |
| SCC2A-21-16P | 25,5 | | | | | |
| SCC2A-25-16P | 26,3 | 24,0 | M26×1,0P | 32,0 | 26,0 | 4-∅ 3,3 |
| SCC2A-25-24P | 26,2 | | | | | |
| SCC2A-25-24P | 26,5 | 27,9 | M30×1,0P | 35,0 | 29,5 | 4-∅ 3,3 |



| Product Number | A | ∅ B | ∅ C | D |
|----------------|------|------|------|----------|
| SCC1A-13- 3P | 45,0 | 21,0 | 8,0 | M18×1,0P |
| SCC1A-13- 5P | | | | |
| SCC1A-16- 7P | | | | |
| SCC1A-16- 8P | 47,8 | 25,0 | 11,5 | M22×1,0P |
| SCC1A-16-10P | | | | |
| SCC1A-21- 3P | | | | |
| SCC1A-21- 4P | 51,5 | 29,0 | 14,0 | M26×1,0P |
| SCC1A-21-10P | | | | |
| SCC1A-21-16P | | | | |
| SCC1A-25-16P | 55,5 | 33,0 | 17,5 | M30×1,0P |
| SCC1A-25-24P | | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



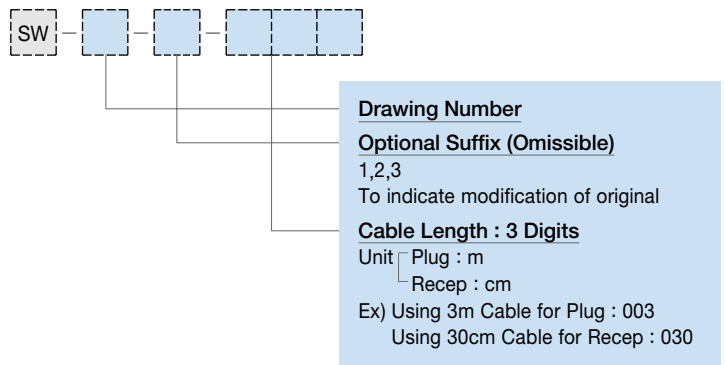
Features

- Rugged
- Light weight
- Low cost
- General purpose
- Standard and Custom Design

Applications

- Industrial

■ **Part Numbering**



■ **Plug Cable Assembly**



| Type | Construction |
|------|---------------------------------------|
| A | SCC Connector + Cable + Housing |
| B | SCC Connector + Cable + SCC Connector |

※ Design and Customization Service Available

■ **Receptacle Cable Assembly**



| Type | Construction |
|------|--|
| A | SCC Connector + wire + Open end |
| B | SCC Connector + wire + Housing |
| C | SCC Connector + wire + Housing with core |

※ Design and Customization Service Available

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SCN / SCK Series Part Numbering



Features

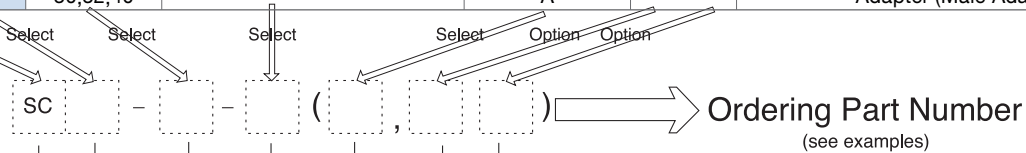
- Rugged
- Simple construction
- Stable mechanical / Electrical performances

Applications

- Electric / Electronic
- Communication

Part Numbering

| Product Number | | Size | Number of Contacts | Suffix (Body Type) | Option | Notes |
|----------------|--------|--------------------------|---|------------------------------|--------|-----------------------------|
| Series | Prefix | | | | L/T | |
| SC | K | 12,16,20,25, 30,32,40 | 12 size:2 or 4 16 size:2,3,4,5,6,7,8 20 size:2,3,4,5,6,8,10,20 25 size:2,3,4,5,6,8,10,12 30 size:2,3,4,6,8,10,14 32 size:2,3,4 40 size:2,3,4,12 Check each product for more detail | P | ● | SCK series plug |
| | | | | PL | ● | SCK series Right-angle plug |
| | R | | | Receptacle (Panel type) | | |
| | RC | | | Receptacle Cover | | |
| | R | | | Receptacle (Nut type) | | |
| | RPCB | | | Receptacle (PCB type) | | |
| | BRPCB | | | Bulkhead Receptacle | | |
| | P | | | Plug (Reverse contact) | | |
| | R | | | Receptacle (Reverse contact) | | |
| | R | | | Receptacle (Reverse contact) | | |
| P | | Adapter (Female Adapter) | | | | |
| A | | Adapter (Male Adapter) | | | | |



Examples

- SCK - 12 - 4 (P)**
SCK series - Size 12 Plug - 4 Female Contacts
- SCK - 16 - 8 (R)**
SCK series - Size 16 Panel Type Receptacle - 8 Male Contacts
- SCN - 20 - 10 (R)**
SCN series - Size 20 Nut Type Receptacle - 10 Male Contacts
- SCA - 30 - 2 (P)**
SCA series - Size 30 Adapter - 2 Female Contacts
- SCK - 16 - 4 (P , L/T)**
SCK series - Size 16 Plug - 4 Female Contact (Lock Type)
- SCK - 16 - 8 (PL , L/T)**
SCK series - Size 16 Right Angle Plug - 8 Female Contacts
- SCN - 16 - 7 (RPCB)**
SCN series - Size 16 PCB Receptacle - 7 Male Contacts

Connector Series (Body Type)

- SCK - Plug(Female) / Receptacle(Male)
- SCN - Nut type receptacle(Male)
- SCKH - Plug(Male) / Receptacle(Female)
- SCNH - Receptacle(Female)
- SCA - Adapter

Size

12,16,20,25,30,32,40

No. of Contacts

12 Size : 2 or 4
 16 Size : 2,3,4,5,6,7,8
 20 Size : 2,3,4,5,6,8,10,20
 25 Size : 2,3,4,5,6,8,10,12
 30 Size : 2,3,4,6,8,10,14
 32 Size : 2,3,4
 40 Size : 2,3,4,12

Extended Body Type

- P : Plug
- PL : Right angle Plug
- R : Receptacle
- RPCB : PCB Receptacle
- BRPCB : Bulkhead PCB Receptacle
- RC : Receptacle Cap
- A : Adapter

Option

L/T : Lock type (available in size 16 with 4,5,6,7,8 contacts only)

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

■ Major Performances / Contact Arrangements

| Performance Size / No. of Contacts | | Withstanding Voltage/min. | Current | Insulation Resistance (Minimum) | Contact Resistance (Maximum) | Contact \varnothing | Solder Pot \varnothing | Wire Gauge (Maximum) | Contact Arrangement |
|------------------------------------|----|---------------------------|---------|---------------------------------|------------------------------|-----------------------|--------------------------|----------------------|---------------------|
| 12 | 2 | AC 500V | 4A | 1,000M Ω | 5m Ω | 2.0 | 1.2 | AWG20 | |
| | | | 3A | | | 1.5 | 1.2 | AWG20 | |
| | 4 | AC 500V | 4A | 1,000M Ω | 5m Ω | 2.0 | 1.2 | AWG20 | |
| | | | 3A | | | 1.0 | 1.0 | AWG20 | |
| 16 | 2 | AC 500V | 5A | 1,000M Ω | 5m Ω | 2.5 | 1.5 | AWG18 | |
| | 3 | AC 500V | 5A | 1,000M Ω | 5m Ω | 2.5 | 1.5 | AWG18 | |
| | 4 | AC 500V | 5A | 1,000M Ω | 5m Ω | 2.5 | 1.5 | AWG18 | |
| | 5 | AC 500V | 4A | 1,000M Ω | 5m Ω | 2.0 | 1.2 | AWG20 | |
| | 6 | AC 500V | 3A | 1,000M Ω | 5m Ω | 1.2 | 1.0 | AWG20 | |
| | 7 | AC 500V | 3A | 1,000M Ω | 5m Ω | 1.2 | 1.0 | AWG20 | |
| | 8 | AC 500V | 3A | 1,000M Ω | 5m Ω | 1.2 | 1.0 | AWG20 | |
| 20 | 2 | AC 1000V | 7A | 1,000M Ω | 5m Ω | 3.0 | 2.2 | AWG14 | |
| | 3 | AC 1000V | 7A | 1,000M Ω | 5m Ω | 3.0 | 2.2 | AWG14 | |
| | 4 | AC 1000V | 7A | 1,000M Ω | 5m Ω | 3.0 | 2.2 | AWG14 | |
| | 5 | AC 1000V | 7A | 1,000M Ω | 5m Ω | 3.0 | 2.2 | AWG14 | |
| | 6 | AC 1000V | 4A | 1,000M Ω | 5m Ω | 2.0 | 1.5 | AWG18 | |
| | 8 | AC 1000V | 3A | 1,000M Ω | 5m Ω | 1.5 | 1.0 | AWG20 | |
| | 10 | AC 1000V | 3A | 1,000M Ω | 5m Ω | 1.5 | 1.0 | AWG20 | |
| | 20 | AC 1000V | 2A | 1,000M Ω | 5m Ω | 0.7 | 0.8 | AWG22 | |

■ Symbol for Contact Diameter

| Mark | | | | | | | | | | | | | |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Diameter | 0.7 | 1.0 | 1.2 | 1.5 | 1.8 | 2.0 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 | 6.0 | 7.0 |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SCN / SCK Series Specifications

Major Performances / Contact Arrangements

| Performance Size / No. of Contacts | | Withstanding Voltage/min. | Current | Insulation Resistance (Minimum) | Contact Resistance (Maximum) | Contact \varnothing | Solder Pot \varnothing | Wire Gauge (Maximum) | Contact Arrangement |
|------------------------------------|----|---------------------------|---------|---------------------------------|------------------------------|-----------------------|--------------------------|----------------------|---------------------|
| 25 | 2 | AC 1000V | 10A | 1,000M Ω | 5m Ω | 3.5 | 2.7 | AWG12 | |
| | 3 | AC 1000V | 10A | 1,000M Ω | 5m Ω | 3.5 | 2.7 | AWG12 | |
| | 4 | AC 1000V | 10A | 1,000M Ω | 5m Ω | 3.5 | 2.7 | AWG12 | |
| | 5 | AC 1000V | 10A | 1,000M Ω | 5m Ω | 3.5 | 2.7 | AWG12 | |
| | 6 | AC 1000V | 4A | 1,000M Ω | 5m Ω | 2.0 | 1.5 | AWG18 | |
| | 8 | AC 1000V | 4A | 1,000M Ω | 5m Ω | 2.0 | 1.5 | AWG18 | |
| | 10 | AC 1000V | 4A | 1,000M Ω | 5m Ω | 2.0 | 1.5 | AWG18 | |
| | 12 | AC 1000V | 4A | 1,000M Ω | 5m Ω | 2.0 | 1.5 | AWG18 | |
| 30 | 2 | AC 500V | 15A | 1,000M Ω | 5m Ω | 3.5 | 2.7 | AWG12 | |
| | 3 | AC 500V | 15A | 1,000M Ω | 5m Ω | 3.5 | 2.7 | AWG12 | |
| | 4 | AC 500V | 15A | 1,000M Ω | 5m Ω | 3.5 | 2.7 | AWG12 | |
| | 6 | AC 1000V | 15A | 1,000M Ω | 5m Ω | 3.5 | 2.7 | AWG12 | |
| | 8 | AC 1000V | 15A | 1,000M Ω | 5m Ω | 3.5 | 2.7 | AWG12 | |
| | 10 | AC 1000V | 5A | 1,000M Ω | 5m Ω | 2.5 | 2.2 | AWG14 | |
| | 14 | AC 1000V | 4A | 1,000M Ω | 5m Ω | 1.8 | 1.2 | AWG20 | |

Symbol for Contact Diameter

| Mark | | | | | | | | | | | | | |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Diameter | 0.7 | 1.0 | 1.2 | 1.5 | 1.8 | 2.0 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 | 6.0 | 7.0 |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Major Performances / Contact Arrangements

| Performance Size / No. of Contacts | Withstanding Voltage/min. | Current | Insulation Resistance (Minimum) | Contact Resistance (Maximum) | Contact \varnothing | Solder Pot \varnothing | Wire Gauge (Maximum) | Contact Arrangement | |
|------------------------------------|---------------------------|----------|---------------------------------|------------------------------|-----------------------|--------------------------|----------------------|---------------------|--|
| 32 | 2 | AC 1000V | 40A | 1,000M Ω | 5m Ω | 7.0 | 4.1 | AWG8 | |
| | 3 | AC 1000V | 40A | 1,000M Ω | 5m Ω | 7.0 | 4.1 | AWG8 | |
| | 4 | AC 1000V | 30A | 1,000M Ω | 5m Ω | 6.0 | 4.2 | AWG6 | |
| 40 | 2 | AC 1000V | 40A | 1,000M Ω | 5m Ω | 7.0 | 4.5 | AWG6 | |
| | 3 | AC 1000V | 40A | 1,000M Ω | 5m Ω | 7.0 | 4.5 | AWG6 | |
| | 4 | AC 1000V | 40A | 1,000M Ω | 5m Ω | 7.0 | 4.5 | AWG6 | |
| | 12 | AC 1000V | 10A | 1,000M Ω | 5m Ω | 3.0 | 2.0 | AWG14 | |
| 4A | | | 2.0 | | | 1.5 | AWG18 | | |

! ¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
⁴ Connector contact arrangement is from mating surface.

■ Symbol for Contact Diameter

| Mark | | | | | | | | | | | | | |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Diameter | 0,7 | 1,0 | 1,2 | 1,5 | 1,8 | 2,0 | 2,5 | 3,0 | 3,5 | 4,0 | 4,5 | 6,0 | 7,0 |

■ Material Used / Finish

| | | Material | Finish |
|-----------|---------------|------------------------|------------------------|
| Body | | Zinc alloy | Ni plating |
| Insulator | Size 12 | PA & Bakelite | Green |
| | Size 16 | Bakelite | Black |
| | Size 20,25,30 | Bakelite | Green |
| | Size 32,40 | Epoxy | Green |
| Contacts | Male | Brass | Silver or Gold plating |
| | Female | Brass, Phosphor Bronze | Silver or Gold plating |

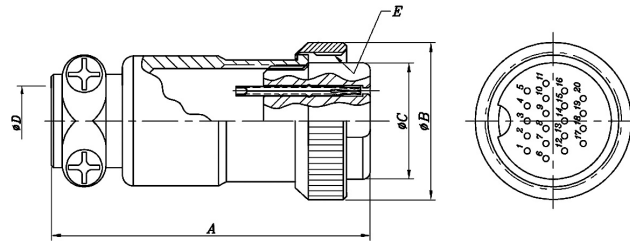
■ SCK / SCN Series Mini-map



Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

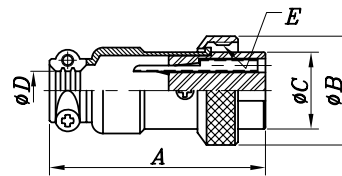


■ SCK Plug



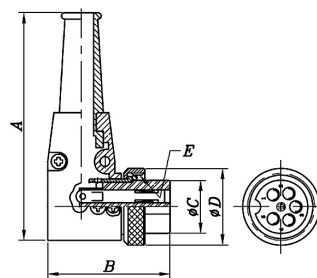
| Product Number | A | ø B | ø C | ø D | E | | | | | |
|----------------|------|------|------|------|------------|------|------|------|------|-----------|
| SCK-12- 2(P) | 28.6 | 14.5 | 9.2 | 5.0 | M13×0.75P | | | | | |
| SCK-12- 4(P) | | | | | | | | | | |
| SCK-16- 2(P) | 35.7 | 18.2 | 12.6 | 6.4 | M16×1.0P | | | | | |
| SCK-16- 3(P) | | | | | | | | | | |
| SCK-16- 4(P) | | | | | | | | | | |
| SCK-16- 5(P) | | | | | | | | | | |
| SCK-20- 2(P) | 42.5 | 21.8 | 15.5 | 8.2 | M19×1.0P | | | | | |
| SCK-20- 3(P) | | | | | | | | | | |
| SCK-20- 4(P) | | | | | | | | | | |
| SCK-20- 5(P) | | | | | | | | | | |
| SCK-20- 6(P) | | | | | | | | | | |
| SCK-20- 8(P) | | | | | | | | | | |
| SCK-20-10(P) | | | | | | | | | | |
| SCK-20-20(P) | | | | | | | | | | |
| SCK-25- 2(P) | | | | | | 50.0 | 28.2 | 21.5 | 11.0 | M25×1.25P |
| SCK-25- 3(P) | | | | | | | | | | |
| SCK-25- 4(P) | | | | | | | | | | |
| SCK-25- 5(P) | | | | | | | | | | |
| SCK-25- 6(P) | | | | | | | | | | |
| SCK-25- 8(P) | | | | | | | | | | |
| SCK-25-10(P) | | | | | | | | | | |
| SCK-25-12(P) | | | | | | | | | | |
| SCK-30- 2(P) | 53.5 | 33.0 | 25.0 | 13.0 | M29×1.0P | | | | | |
| SCK-30- 3(P) | | | | | | | | | | |
| SCK-30- 4(P) | | | | | | | | | | |
| SCK-30- 6(P) | | | | | | | | | | |
| SCK-30- 8(P) | | | | | | | | | | |
| SCK-30-10(P) | | | | | | | | | | |
| SCK-30-14(P) | 59.0 | 37.8 | 28.3 | 15.0 | M34×1.0P | | | | | |
| SCK-32- 2(P) | | | | | | | | | | |
| SCK-32- 3(P) | | | | | | | | | | |
| SCK-40- 2(P) | 67.7 | 45.5 | 34.8 | 18.0 | M41.5×1.5P | | | | | |
| SCK-40- 3(P) | | | | | | | | | | |
| SCK-40- 4(P) | | | | | | | | | | |
| SCK-40-12(P) | | | | | | | | | | |

■ SCK Series Plug (Lock Type)



| Product Number | A | ø B | ø C | ø D | E |
|------------------|------|------|------|-----|----------|
| SCK-16-4(P, L/T) | 36.0 | 18.2 | 12.6 | 6.4 | M16×1.0P |
| SCK-16-5(P, L/T) | | | | | |
| SCK-16-6(P, L/T) | | | | | |
| SCK-16-7(P, L/T) | | | | | |
| SCK-16-8(P, L/T) | | | | | |

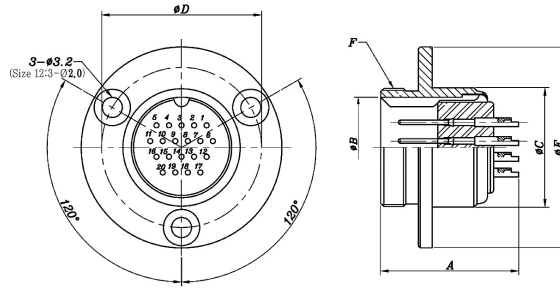
■ SCK Right-Angle Plug



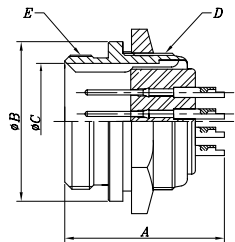
| Product Number | A | B | ø C | ø D | E |
|--------------------|------|----|------|------|----------|
| SCK-16-4(P, L/T)-L | 54.0 | 29 | 12.6 | 18.2 | M16×1.0P |
| SCK-16-5(P, L/T)-L | | | | | |
| SCK-16-6(P, L/T)-L | | | | | |
| SCK-16-7(P, L/T)-L | | | | | |
| SCK-16-8(P, L/T)-L | | | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SCK Receptacle



■ SCN Receptacle



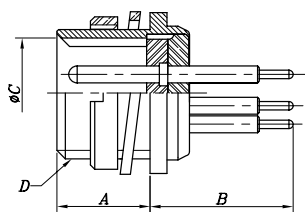
| Product Number | A | ϕB | ϕC | D | E | | | | | |
|----------------|------|----------|----------|-----------|-----------|------|------|------|-----------|----------|
| SCN-12- 2(R) | 17,3 | 15,0 | 9,6 | M12×0,75P | M13×0,75P | | | | | |
| SCN-12- 4(R) | | | | | | | | | | |
| SCN-16- 2(R) | 20,6 | 18,8 | 13,0 | M16×0,75P | M16×1,0P | | | | | |
| SCN-16- 3(R) | | | | | | | | | | |
| SCN-16- 4(R) | | | | | | | | | | |
| SCN-16- 5(R) | | | | | | | | | | |
| SCN-16- 6(R) | | | | | | | | | | |
| SCN-16- 7(R) | | | | | | | | | | |
| SCN-16- 8(R) | | | | | | | | | | |
| SCN-20- 2(R) | | | | | | 22,0 | 23,0 | 15,9 | M19×0,75P | M19×1,0P |
| SCN-20- 3(R) | | | | | | | | | | |
| SCN-20- 4(R) | | | | | | | | | | |
| SCN-20- 5(R) | | | | | | | | | | |
| SCN-20- 6(R) | | | | | | | | | | |
| SCN-20- 8(R) | | | | | | | | | | |
| SCN-20-10(R) | | | | | | | | | | |
| SCN-20-20(R) | | | | | | | | | | |
| SCN-25- 2(R) | 28,0 | 29,0 | 21,9 | M25×1,0P | M25×1,25P | | | | | |
| SCN-25- 3(R) | | | | | | | | | | |
| SCN-25- 4(R) | | | | | | | | | | |
| SCN-25- 5(R) | | | | | | | | | | |
| SCN-25- 6(R) | | | | | | | | | | |
| SCN-25- 8(R) | | | | | | | | | | |
| SCN-25-10(R) | | | | | | | | | | |
| SCN-25-12(R) | | | | | | | | | | |

| Product Number | A | ϕB | ϕC | ϕD | ϕE | F | | | | | | |
|----------------|------|----------|----------|----------|----------|-----------|------|------|------|------|------|------------|
| SCK-12- 2(R) | 17,3 | 9,6 | 11,8 | 17,0 | 22,0 | M13×0,75P | | | | | | |
| SCK-12- 4(R) | | | | | | | | | | | | |
| SCK-16- 2(R) | 21,0 | 13,0 | 15,9 | 24,0 | 30,7 | M16×1,0P | | | | | | |
| SCK-16- 3(R) | | | | | | | | | | | | |
| SCK-16- 4(R) | | | | | | | | | | | | |
| SCK-16- 5(R) | | | | | | | | | | | | |
| SCK-16- 6(R) | | | | | | | | | | | | |
| SCK-16- 7(R) | | | | | | | | | | | | |
| SCK-16- 8(R) | | | | | | | | | | | | |
| SCK-20- 2(R) | | | | | | | 22,0 | 16,0 | 19,0 | 25,5 | 32,0 | M19×1,0P |
| SCK-20- 3(R) | | | | | | | | | | | | |
| SCK-20- 4(R) | | | | | | | | | | | | |
| SCK-20- 5(R) | | | | | | | | | | | | |
| SCK-20- 6(R) | | | | | | | | | | | | |
| SCK-20- 8(R) | | | | | | | | | | | | |
| SCK-20-10(R) | | | | | | | | | | | | |
| SCK-20-20(R) | | | | | | | | | | | | |
| SCK-25- 2(R) | 27,5 | 21,9 | 25,0 | 34,0 | 42,0 | M25×1,25P | | | | | | |
| SCK-25- 3(R) | | | | | | | | | | | | |
| SCK-25- 4(R) | | | | | | | | | | | | |
| SCK-25- 5(R) | | | | | | | | | | | | |
| SCK-25- 6(R) | | | | | | | | | | | | |
| SCK-25-8(R) | | | | | | | | | | | | |
| SCK-25-10(R) | | | | | | | | | | | | |
| SCK-25-12(R) | | | | | | | | | | | | |
| SCK-30- 2(R) | | | | | | | 28,2 | 25,7 | 29,0 | 37,0 | 45,5 | M29×1,0P |
| SCK-30- 3(R) | | | | | | | | | | | | |
| SCK-30- 4(R) | | | | | | | | | | | | |
| SCK-30- 6(R) | | | | | | | | | | | | |
| SCK-30- 8(R) | | | | | | | | | | | | |
| SCK-30-10(R) | | | | | | | | | | | | |
| SCK-30-14(R) | | | | | | | | | | | | |
| SCK-32- 2(R) | 33,5 | 28,9 | 32,0 | 42,0 | 50,8 | M34×1,0P | | | | | | |
| SCK-32- 3(R) | | | | | | | | | | | | |
| SCK-32- 4(R) | | | | | | | | | | | | |
| SCK-40- 2(R) | | | | | | | 39,5 | 35,5 | 40,0 | 50,0 | 58,0 | M41,5×1,5P |
| SCK-40- 3(R) | | | | | | | | | | | | |
| SCK-40- 4(R) | | | | | | | | | | | | |
| SCK-40-12(R) | | | | | | | | | | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SCN / SCK Series SCN Male / PCB Type Receptacle

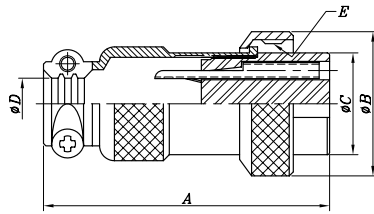
■ SCN PCB Receptacle Solder type also available



| Product Number | A | B | ϕC | D |
|-----------------|------|-----------------------------|----------|----------|
| SCN-16-2(BRPCB) | 11,0 | 11,7~17,7 (Customizable) | 13 | M16×1,0P |
| SCN-16-3(BRPCB) | | | | |
| SCN-16-4(BRPCB) | | | | |
| SCN-16-5(BRPCB) | | | | |
| SCN-16-6(BRPCB) | | | | |
| SCN-16-7(BRPCB) | | | | |
| SCN-16-8(BRPCB) | 12,5 | 11,7~17,7 (Customizable) | 16 | M19×1,0P |
| SCN-20-3(BRPCB) | | | | |
| SCN-20-4(BRPCB) | | | | |

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

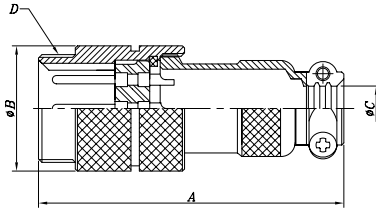
■ SCA Adapter (Female Contact)



SCA-25-8(P)

| Product Number | A | ∅ B | ∅ C | ∅ D | E | | | | | |
|----------------|------|------|------|------|------------|------|------|------|------|----------|
| SCA-16- 2(P) | 35,7 | 18,2 | 12,6 | 6,4 | M16×1,0P | | | | | |
| SCA-16- 3(P) | | | | | | | | | | |
| SCA-16- 4(P) | | | | | | | | | | |
| SCA-16- 5(P) | | | | | | | | | | |
| SCA-20- 2(P) | 42,5 | 21,8 | 15,5 | 8,2 | M19×1,0P | | | | | |
| SCA-20- 3(P) | | | | | | | | | | |
| SCA-20- 4(P) | | | | | | | | | | |
| SCA-20- 5(P) | | | | | | | | | | |
| SCA-20- 6(P) | | | | | | | | | | |
| SCA-20- 8(P) | | | | | | | | | | |
| SCA-20-10(P) | | | | | | | | | | |
| SCA-20-20(P) | | | | | | | | | | |
| SCA-25- 2(P) | 50,0 | 28,2 | 21,5 | 11,0 | M25×1,25P | | | | | |
| SCA-25- 3(P) | | | | | | | | | | |
| SCA-25- 4(P) | | | | | | | | | | |
| SCA-25- 5(P) | | | | | | | | | | |
| SCA-25- 6(P) | | | | | | | | | | |
| SCA-25- 8(P) | | | | | | | | | | |
| SCA-25-10(P) | | | | | | | | | | |
| SCA-25-12(P) | | | | | | | | | | |
| SCA-30- 2(P) | | | | | | 53,5 | 33,0 | 25,0 | 13,0 | M29×1,0P |
| SCA-30- 3(P) | | | | | | | | | | |
| SCA-30- 4(P) | | | | | | | | | | |
| SCA-30- 6(P) | | | | | | | | | | |
| SCA-30- 8(P) | | | | | | | | | | |
| SCA-32- 2(P) | 59,0 | 38,2 | 28,0 | 15,0 | M34×1,0P | | | | | |
| SCA-32- 3(P) | | | | | | | | | | |
| SCA-32- 4(P) | | | | | | | | | | |
| SCA-40- 2(P) | 67,7 | 45,5 | 34,8 | 18,0 | M41,5×1,5P | | | | | |
| SCA-40- 3(P) | | | | | | | | | | |
| SCA-40- 4(P) | | | | | | | | | | |
| SCA-40-12(P) | | | | | | | | | | |

■ SCA Adapter (Male Contact)



SCA-25-8(A)

| Product Number | A | ∅ B | ∅ C | D | | | | |
|----------------|------|------|------|------------|------|------|------|----------|
| SCA-16- 2(A) | 43,7 | 18,2 | 6,4 | M16×1,0P | | | | |
| SCA-16- 3(A) | | | | | | | | |
| SCA-16- 4(A) | | | | | | | | |
| SCA-16- 5(A) | | | | | | | | |
| SCA-20- 2(A) | 49,0 | 21,8 | 8,2 | M19×1,0P | | | | |
| SCA-20- 3(A) | | | | | | | | |
| SCA-20- 4(A) | | | | | | | | |
| SCA-20- 5(A) | | | | | | | | |
| SCA-20- 6(A) | | | | | | | | |
| SCA-20- 8(A) | | | | | | | | |
| SCA-20-10(A) | | | | | | | | |
| SCA-20-20(A) | | | | | | | | |
| SCA-25- 2(A) | 56,2 | 28,2 | 11,0 | M25×1,25P | | | | |
| SCA-25- 3(A) | | | | | | | | |
| SCA-25- 4(A) | | | | | | | | |
| SCA-25- 5(A) | | | | | | | | |
| SCA-25- 6(A) | | | | | | | | |
| SCA-25- 8(A) | | | | | | | | |
| SCA-25-10(A) | | | | | | | | |
| SCA-25-12(A) | | | | | | | | |
| SCA-30- 2(A) | | | | | 62,0 | 33,0 | 13,0 | M29×1,0P |
| SCA-30- 3(A) | | | | | | | | |
| SCA-30- 4(A) | | | | | | | | |
| SCA-30- 6(A) | | | | | | | | |
| SCA-30- 8(A) | | | | | | | | |
| SCA-32- 2(A) | 67,5 | 38,2 | 15,0 | M34×1,0P | | | | |
| SCA-32- 3(A) | | | | | | | | |
| SCA-32- 4(A) | | | | | | | | |
| SCA-40- 2(A) | 74,5 | 45,5 | 18,0 | M41,5×1,5P | | | | |
| SCA-40- 3(A) | | | | | | | | |
| SCA-40- 4(A) | | | | | | | | |
| SCA-40-12(A) | | | | | | | | |

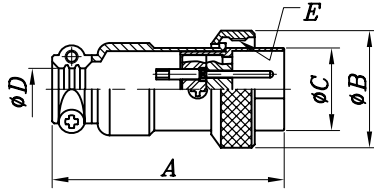
■ SCA Adapter (Set)



SCA Adapter sets are available.
 SCA sets include both Male and Female adapter.
 To order a set, choose (P,A) at the end of part number.

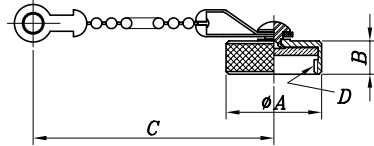
ex) To order SCA-25-10(P) and SCA-25-10(A),
 Select SCA-25-10(P,A)

■ SCKH Plug



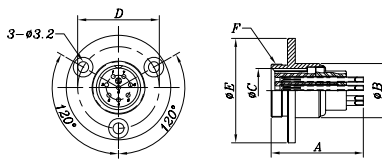
| Product Number | A | ∅ B | ∅ C | ∅ D | E |
|----------------|------|------|------|------|-----------|
| SCKH-16- 4(P) | 36,0 | 18,2 | 12,7 | 6,4 | M16×1,0P |
| SCKH-16- 5(P) | | | | | |
| SCKH-16- 8(P) | | | | | |
| SCKH-20-18(P) | 42,3 | 21,8 | 15,6 | 8,2 | M19×1,0P |
| SCKH-25- 2(P) | 50,0 | 28,2 | 21,5 | 11,0 | M25×1,25P |
| SCKH-25- 4(P) | | | | | |
| SCKH-30- 2(P) | 54,0 | 33,0 | 25,0 | 13,0 | M29×1,0P |

■ SCK Receptacle Cap



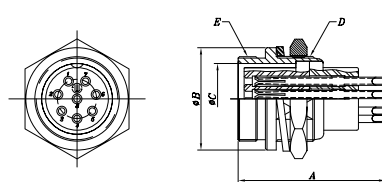
| Product Number | ∅ A | B | C | D |
|----------------|------|-----|-----|------------|
| SCK-12(RC) | 14,7 | 4,7 | 130 | M13×0,75P |
| SCK-16(RC) | 18,0 | 6,2 | 130 | M16×1,0P |
| SCK-20(RC) | 21,8 | 7,2 | 170 | M19×1,0P |
| SCK-25(RC) | 28,3 | 7,0 | 170 | M25×1,25P |
| SCK-30(RC) | 32,8 | 7,7 | 170 | M29×1,0P |
| SCK-32(RC) | 37,8 | 8,2 | 170 | M34×1,0P |
| SCK-40(RC) | 45,5 | 9,2 | 170 | M41,5×1,5P |

■ SCKH Receptacle



| Product Number | A | ∅ B | ∅ C | ∅ D | ∅ E | F |
|----------------|------|------|------|------|------|-----------|
| SCKH-16- 4(R) | 28,2 | 15,9 | 13,0 | 24,0 | 30,7 | M16×1,0P |
| SCKH-16- 5(R) | | | | | | |
| SCKH-16- 8(R) | | | | | | |
| SCKH-20-18(R) | 20,6 | 19 | 15,9 | 25,5 | 32,0 | M19×1,0P |
| SCKH-25- 2(R) | 31,0 | 25,0 | 21,9 | 34,0 | 42,0 | M25×1,25P |
| SCKH-25- 4(R) | | | | | | |
| SCKH-30- 2(R) | 31,0 | 29,0 | 25,7 | 37,0 | 45,5 | M29×1,0P |

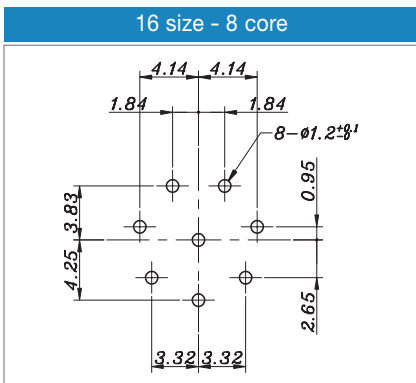
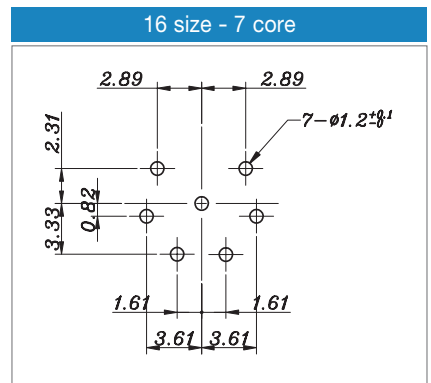
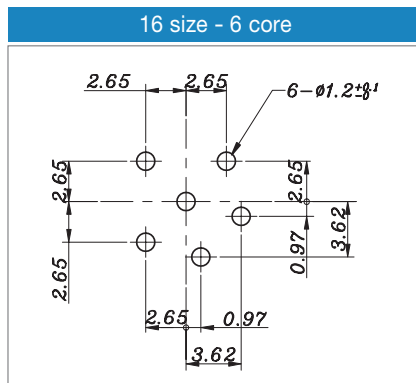
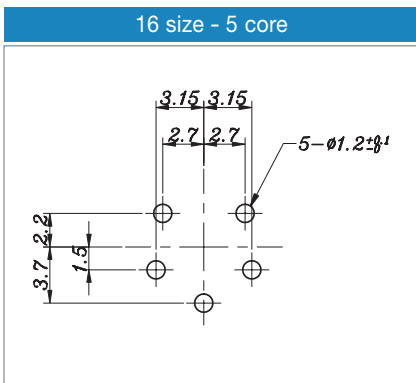
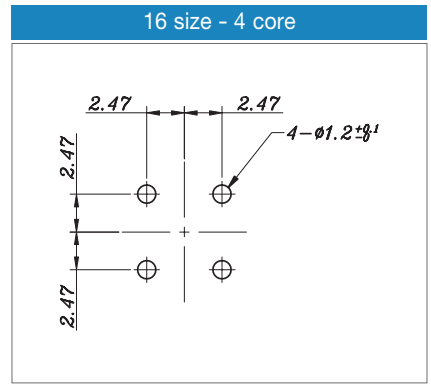
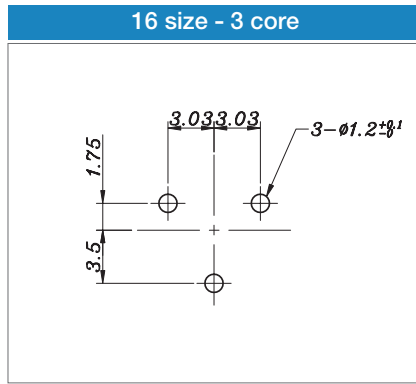
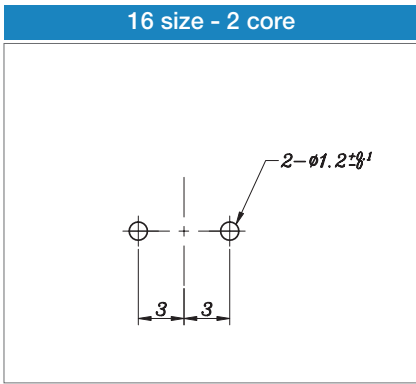
■ SCNH Receptacle



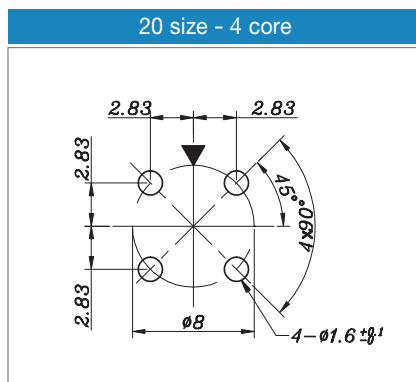
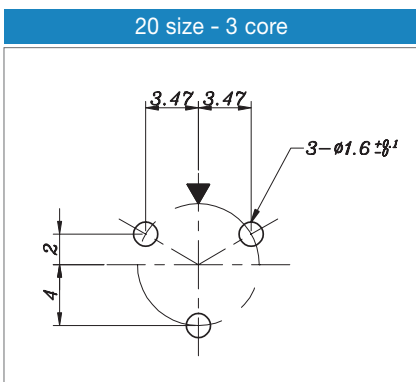
| Product Number | A | ∅ B | ∅ C | D | E |
|----------------|------|------|------|-----------|-----------|
| SCNH-16- 4(R) | 20,6 | 18,8 | 13,0 | M16×0,75P | M16×1,0P |
| SCNH-16- 5(R) | | | | | |
| SCNH-16- 8(R) | | | | | |
| SCNH-20-18(R) | 20,5 | 23,0 | 15,9 | M19×0,75P | M19×1,0P |
| SCNH-25- 2(R) | 22,0 | 29,0 | 21,9 | M25×1,0P | M25×1,25P |
| SCNH-25- 4(R) | | | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SCN-16 BRPCB Series PCB Hole Layout

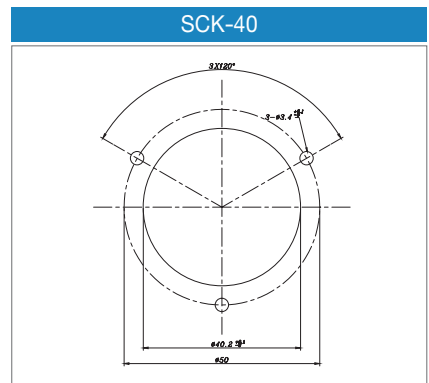
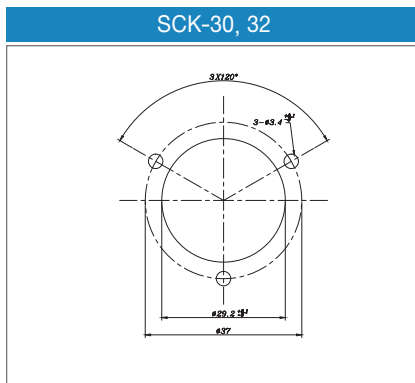
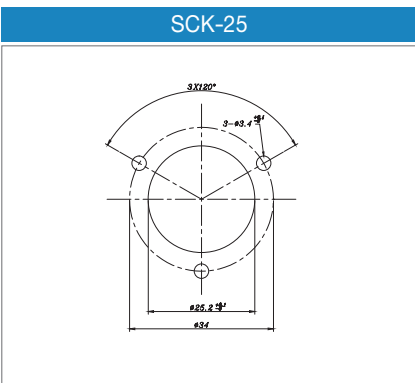
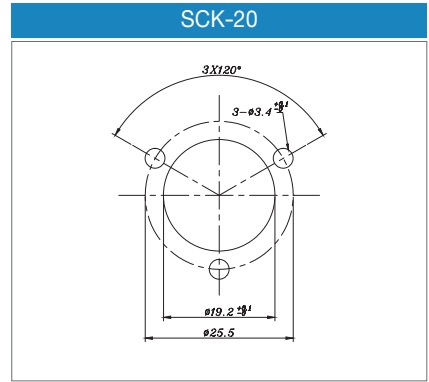
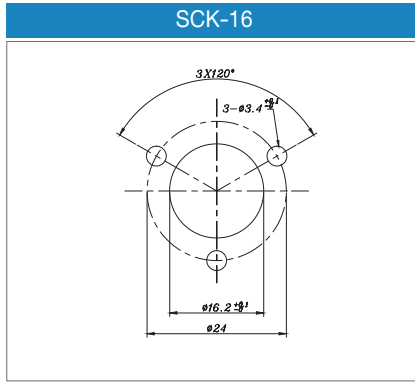
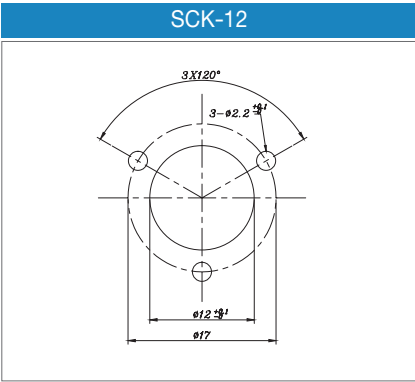


■ SCN-20 BRPCB Series PCB Hole Layout

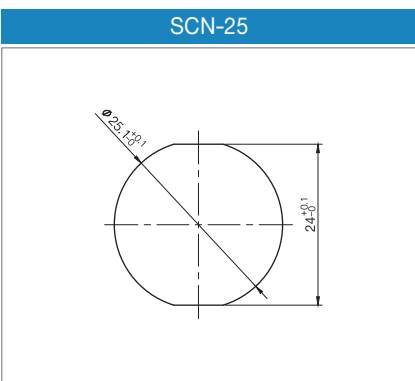
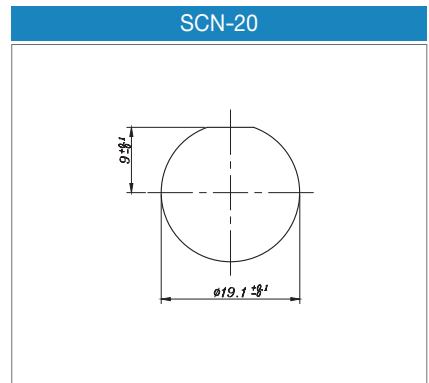
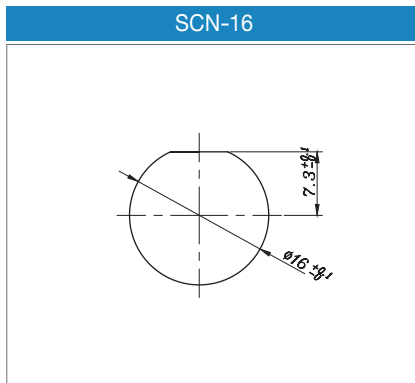
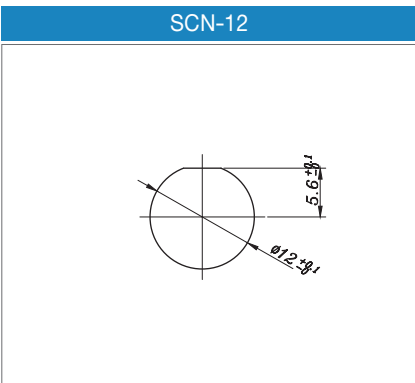


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SCK Series Panel Layout



■ SCN Series Panel Lay Out



Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.



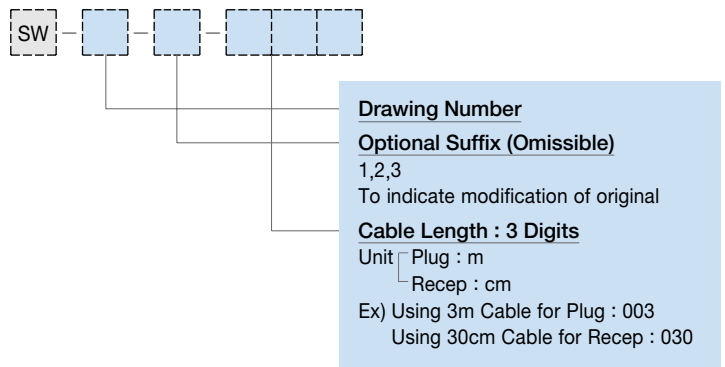
Features

- Rugged
- Simple construction
- Stable mechanical / Electrical performances
- Standard and Custom Design

Applications

- Electric / Electronic
- Communication

■ **Part Numbering**



■ **Plug Cable Assembly**



| Type | Construction |
|------|---------------------------------------|
| A | SCK Connector + Cable + Housing |
| B | SCK Connector + Cable + SCK Connector |

※ Design and Customization Service Available

■ **Receptacle Cable Assembly**



| Type | Construction |
|------|--|
| A | SCK Connector + wire + open end |
| B | SCK Connector + wire + Housing |
| C | SCK Connector + wire + Housing with core |

※ Design and Customization Service Available

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SH Series Part Numbering / Specifications / Mini map



Features

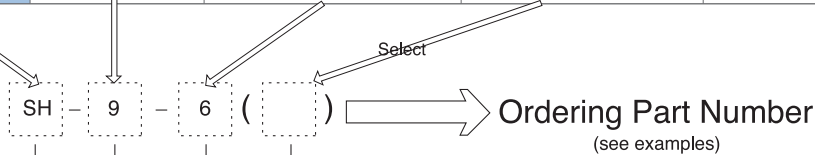
- Compact
- Durable
- Contemporary design

Applications

- Microphone circuitry
- Wireless communication

Part Numbering

| Series | Size | Number of Contacts | Suffix (Contact Type) | Notes |
|--------|------|--------------------|-----------------------|----------------------------|
| SH | 9 | 6 | P | Plug(Male contact) |
| | | | R | Receptacle(Female contact) |



Examples

SH - 9 - 6 (P)
 SH series - Size 9 Plug - 6 Male Contacts
 SH - 9 - 6 (R)
 SH series - Size 9 Receptacle - 6 Female Contact

Connector Series

SH Series

Size

9

No. of Contacts

6

Body Type

P : Plug
 R : Receptacle

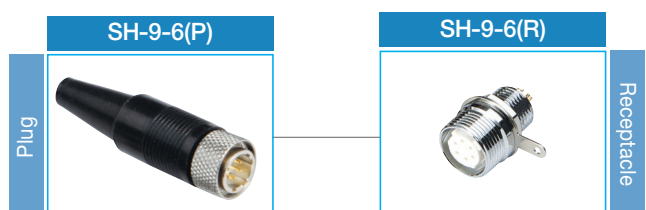
Major Performances / Contact Arrangements

| Performance Size/No. of Contacts | | Rated Voltage | Withstanding Voltage/min. | Current | Insulation Resistance (Minimum) | Contact Resistance (Maximum) | Contact ϕ | Solder Pot ϕ | Contact Arrangement |
|----------------------------------|---|--------------------|---------------------------|---------|---------------------------------|------------------------------|----------------|-------------------|---------------------|
| 9 | 6 | AC 100V DC 140V | AC 300V | 2A | 200M Ω | 10m Ω | ϕ 0,7 | ϕ 0,7 | |

Material Used / Finish

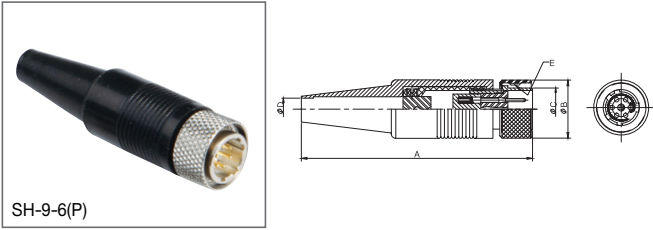
| | | Material | Finish |
|-----------|--------|-------------------------|------------------|
| Body | | Brass | Chromium Plating |
| Insulator | | Glass-filled polyacetal | White |
| Contacts | Male | Brass | Gold Plating |
| | Female | Phosphor bronze | Gold Plating |

SH-9-6 Mini-map



Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

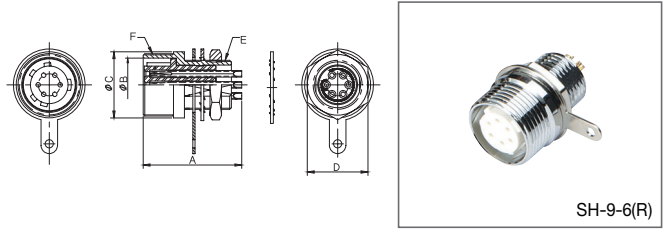
■ SH-9-6(P)



SH-9-6(P)

| Product Number | A | ø B | ø C | ø D | E |
|----------------|------|------|-----|-----|-------------|
| SH-9-6(P) | 51.0 | 12.9 | 9.4 | 4.9 | M11,5×0,75P |

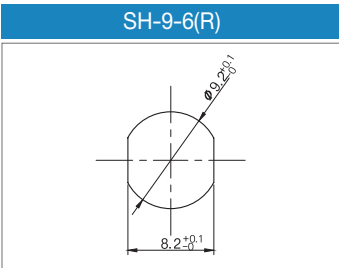
■ SH-9-6(R)



SH-9-6(R)

| Product Number | A | ø B | ø C | D | E | F |
|----------------|----|-----|------|------|----------|-------------|
| SH-9-6(R) | 19 | 9.7 | 12.0 | 11.0 | M9×0,75P | M11,5×0,75P |

■ SH Series Panel Layout



■ Cable Assembly Instruction

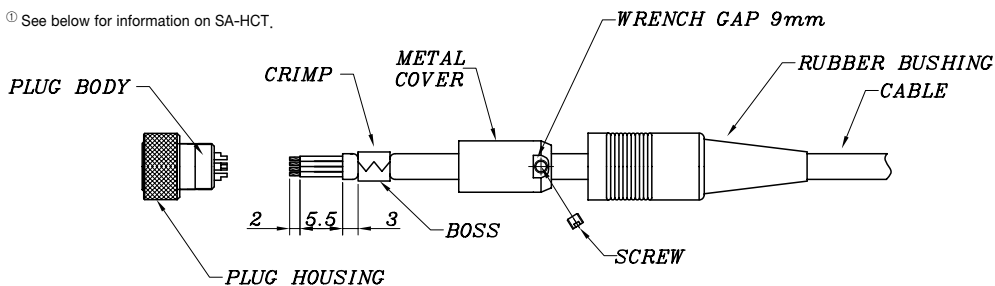
■ General Instruction / Information

- Diagram 1 shows a sample wiring for SN series.
- Soldering must be done quickly and carefully to prevent damage to insulator.
- Receptacles do not require additional instructions.

■ Wiring Sequence

- ① Select cable according to outer diameter and cross section, lower than 0.129mm²(AWG#26).
- ② Insert RUBBER BUSHING to cable.
- ③ Insert PLUG HOUSING to cable.
- ④ Strip cable per dimension given and loosen braid.
- ⑤ Secure PLUG BODY to jig for soldering.
- ⑥ Solder stripped cable to pin.
- ⑦ Fasten CRIMP using hand crimp tool (SA-HCT^①)
- ⑧ Lock PLUG HOUSING and PLUG BODY using tightening force displayed on Table 1.
- ⑨ Tighten WRENCH BOLT using 0.3N force onto one of two embossed parts of crimp.
- ⑩ Cover RUBBER BUSHING onto PLUG HOUSING.

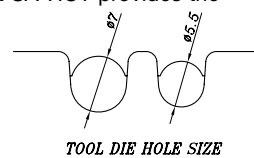
^① See below for information on SA-HCT.



■ SA-HCT (Hand Crimp Tool)



Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results. Use ø 7.0 for SH series.



TOOL DIE HOLE SIZE

SH Series Cable Assembly



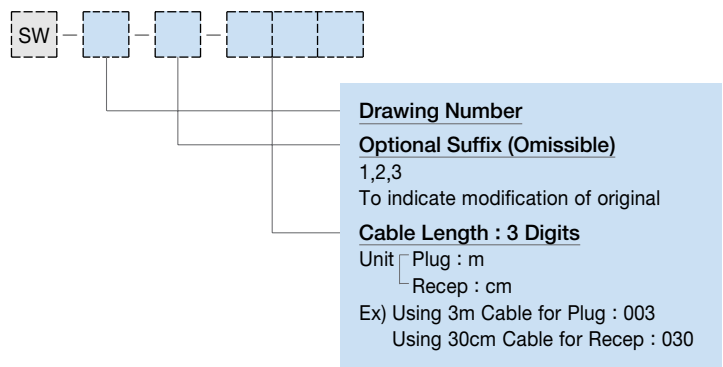
Features

- Compact
- Durable
- Contemporary design
- Standard and Custom Design

Applications

- Microphone circuitry
- Wireless communication

Part Numbering



Plug Cable Assembly



| Type | Construction |
|------|-------------------------------------|
| A | SH Connector + Cable + Housing |
| B | SH Connector + Cable + SH Connector |

※ Design and Customization Service Available

Receptacle Cable Assembly



| Type | Construction |
|------|---|
| A | SH Connector + wire + open end |
| B | SH Connector + wire + Housing |
| C | SH Connector + wire + Housing with core |

※ Design and Customization Service Available

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.



SM Series Part Numbering



Features

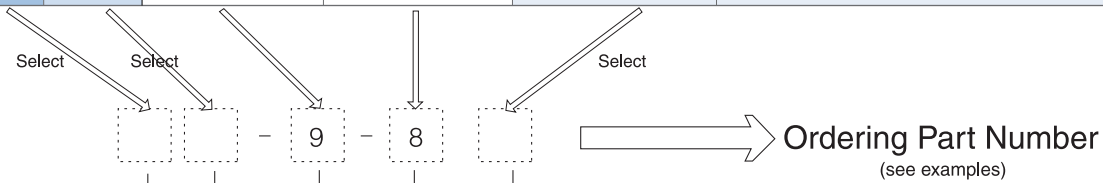
- Miniature circular
- High durability / reliability
- Light weight

Applications

- Professional audio and video
- CCTV system
- Portable wireless radio
- Factory Automation
- Computers and peripherals
- Medical, and much more.

Part Numbering

| Product Number | | Size | Number of Contacts | Suffix (Contact Type) | Notes | | |
|----------------|--------|------|--------------------|-----------------------|-----------------------------|---------|-----------------------------|
| Series | Prefix | | | | | | |
| SMP | | 9 | 8 | P | Plug (Male contact) | | |
| | | | | R | Receptacle (Female contact) | | |
| | H | | | P | Plug (Female contact) | | |
| | | | | R | Receptacle (Male Contact) | | |
| | A | | | | | Adapter | |
| | HA | | | | | Adapter | |
| SMS | | | | | | P | Plug (Male contact) |
| | | | | | | R | Receptacle (Female contact) |
| | H | | | P | Plug (Female contact) | | |
| | | | | R | Receptacle (Male Contact) | | |
| | A | | | Adapter | | | |
| | HA | | | Adapter | | | |



Examples

SMP - 9 - 8 (P)

SMP series - Size 9 Plug - 8 Male contacts

SMS - 9 - 8 (R)

SMS Series - Size 9 Receptacle - 8 Female Contacts

SMSHA - 9 - 8

SMSHA series - Size 9 Adapter - 8 Male Contacts

Connector Series

SMP Series : **Push-pull type**

SMPH - Reverse contact for SMP Series

SMPA - Adapter for SMP Series

SMPHA - Adapter for SMPH Series

SMS Series : **Screw - on type**

SMSH - Reverse contact for SMS Series

SMSA - Adapter for SMS Series

SMSHA - Adapter for SMSH Series

Size

9

No. of Contacts

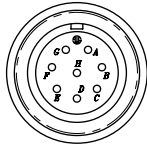
8

Body Type

P : Plug

R : Receptacle

Major Performances / Contact Arrangements

| Size/No. of Contacts | Size 9 |
|---------------------------------|--|
| Performance | 8 |
| Withstanding Voltage (Vrms) | 700 |
| Rated Current | 2A |
| Rated Voltage (Vrms) | 200 |
| Insulation Resistance (Minimum) | 1000M Ω or more at DC500V |
| Contact Resistance (Minimum) | 8m Ω |
| Temperature Range | -25 $^{\circ}$ C to + 85 $^{\circ}$ C |
| Contact Arrangement |  |

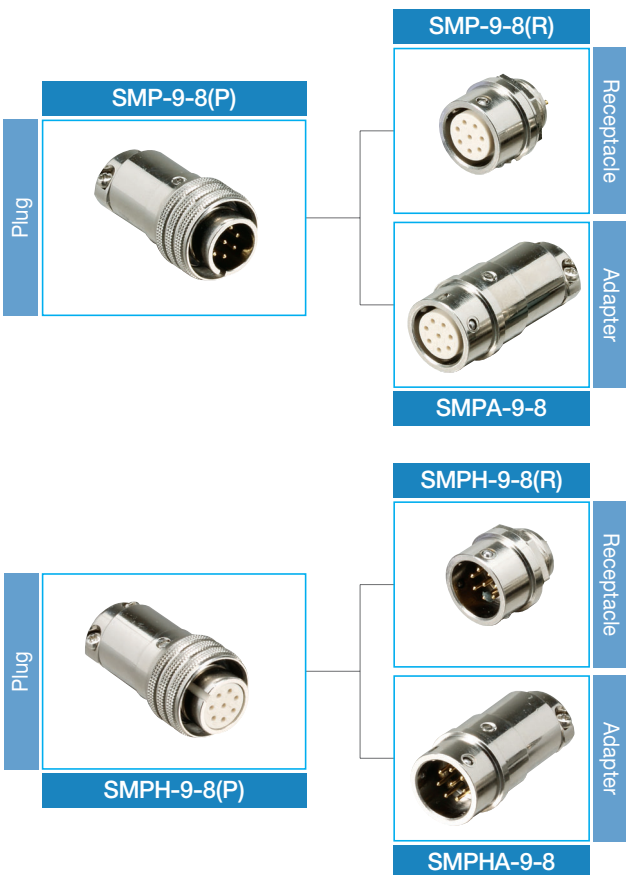
- ! ¹ Withstanding voltage is the tested voltage value in this table.
- ² Insulation resistance is measured at DC 100V.
- ³ Contact resistance is measured at DC 1A.
- Values are from tested items and may not apply to all connectors.
- Specifications subject to change without notice.
- Consult Sam Woo Electronics for the latest specifications.
- ⁴ Connector contact arrangement is from mating surface.

Material Used / Finish

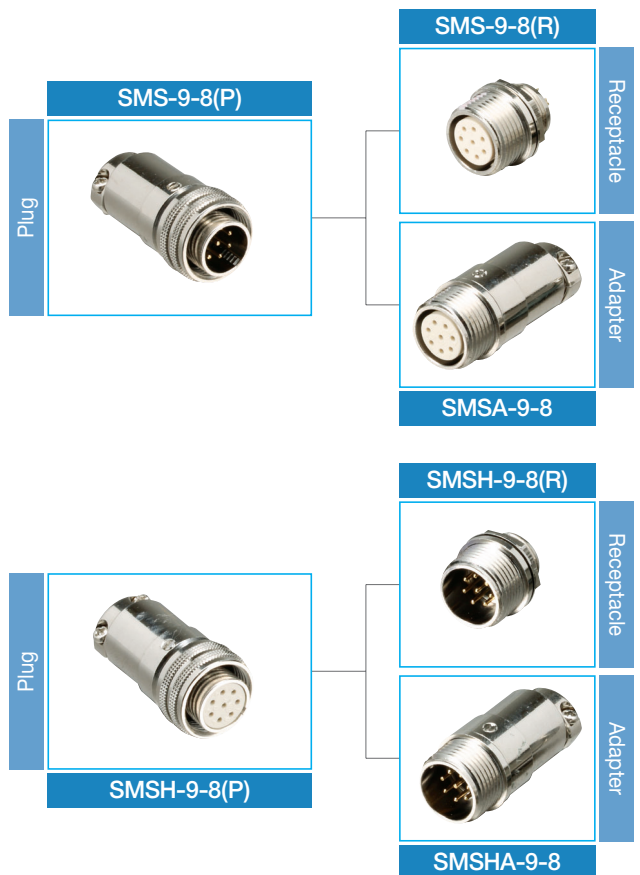
| | Material | Finish |
|-----------|----------|-----------------|
| Body | Brass | Ni Plating |
| Insulator | PA | Black, Ivory |
| Contacts | Male | Brass |
| | Female | Phosphor bronze |
| | | Gold Plating |

SM Series Mini-map

SMP Series Push-Pull Type



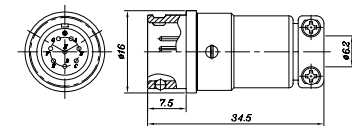
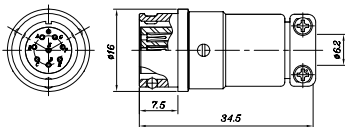
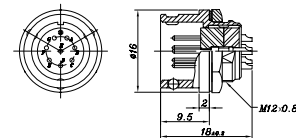
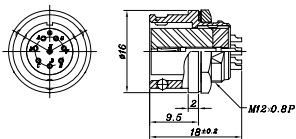
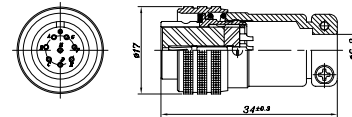
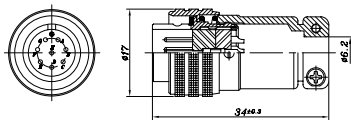
SMS Series Screw-On Type



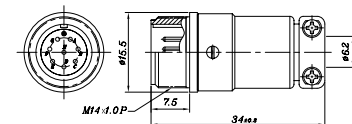
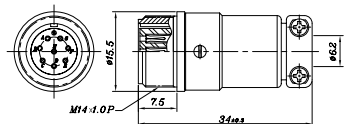
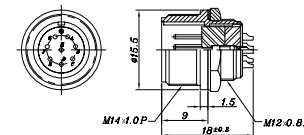
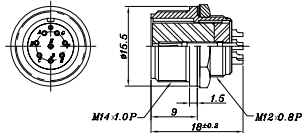
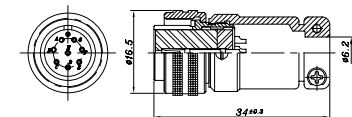
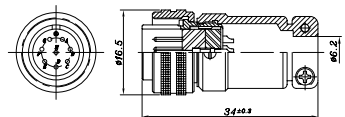
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SM Series Push-Pull / Screw-on type Plug, Receptacle, Adapter

■ Push-Pull type Male / Female Plug, Receptacle, Adapter

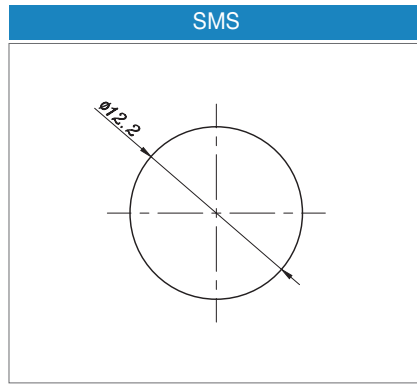
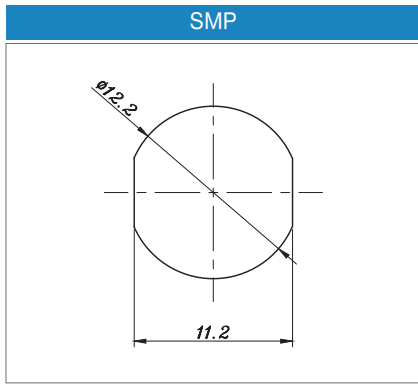


■ Screw-On type Male / Female Plug, Receptacle, Adapter



Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

■ SM Series Panel Layout



SM Series Cable Assembly



Features

- Miniature circular
- High durability / reliability
- Light weight
- Standard and Custom Design

Applications

- Professional audio and video
- CCTV system
- Portable wireless radio
- Factory Automation
- Computers and peripherals
- Medical, and much more.

Part Numbering



Drawing Number
Optional Suffix (Omissible)
 1,2,3
 To indicate modification of original
Cable Length : 3 Digits
 Unit Plug : m
 Recep : cm
 Ex) Using 3m Cable for Plug : 003
 Using 30cm Cable for Recep : 030

Plug Cable Assembly



| Type | Construction |
|------|-------------------------------------|
| A | SM Connector + Cable + Housing |
| B | SM Connector + Cable + SM Connector |

※ Design and Customization Service Available

Receptacle Cable Assembly



| Type | Construction |
|------|---|
| A | SM Connector + wire + open end |
| B | SM Connector + wire + Housing |
| C | SM Connector + wire + Housing with core |

※ Design and Customization Service Available

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.



SN Series Part Numbering



Features

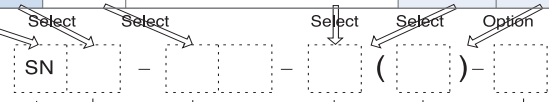
- Push-pull technology
- Miniature circular
- Light weight
- Low cost

Applications

- Professional audio and video
- CCTV system
- Portable wireless radio
- Factory Automation
- Computers and peripherals
- Medical and much more

Part Numbering

| Product Number | | Size | Number of Contacts | Suffix | Optional Suffix | | Contact Type | Notes | | | |
|----------------|--------|---------|---|---|-----------------|---|--------------|----------------------------|----------------------------|---|----------------------------|
| Series | Prefix | | | | S | B | | | | | |
| SN | | 8 or 10 | 8 size : 4,5,6 10 size : 2,3,4,9,10,12 | P / PS | | ● | P | Plug | | | |
| | | | | PL | | ● | P | Right-angle plug | | | |
| | | | | R | ● | ● | S | Receptacle | | | |
| | | | | RPCB | ● | ● | S | PCB receptacle | | | |
| | | | | LRPCB | ● | ● | S | Right-angle PCB receptacle | | | |
| | | | | P / PS | | ● | S | Plug | | | |
| | H | | | | 8 or 10 | 8 size : 4,5,6 10 size : 2,3,4,9,10,12 | PL | | ● | S | Right-angle plug |
| | | | | | | | R | ● | ● | P | Receptacle |
| | | | | | | | RPCB | ● | ● | P | PCB receptacle |
| | | | | | | | LRPCB | ● | ● | P | Right-angle PCB receptacle |
| | | | | | | | 1 | | ● | P | Plug (Clamp type) |
| | | | | | | | 1H | | ● | S | Plug (Clamp type) |
| | A | | 8 or 10 | 8 size : 4,5,6 10 size : 2,3,4,9,10,12 | | ● | ● | S | Adapter | | |
| | | | | | | ● | ● | P | Adapter | | |
| | | | | | P | | ● | P | Plug (Screw-on type) | | |
| | | | | | R | ● | ● | S | Receptacle (Screw-on type) | | |
| 2 | | 8 or 10 | 8 size : 4,5,6 10 size : 2,3,4,9,10,12 | | ● | ● | S | Adapter (Screw-on type) | | | |
| | | | | 2A | | ● | S | Adapter (Screw-on type) | | | |



Ordering Part Number (see examples)

Examples

- SN - 8 - 4 (P)
SN series - Size 8 Plug - 4 Male Contact
- SN - 8 - 6 (RPCB)
SN series - Size 8 PCB Receptacle - 6 Female Contact
- SN - 8 - 6 (P) - SB
SN series - Size 8 - 6 contact (Block Plug) - Silver Plating Contact & Black plug housing
- SN1 - 10 - 12 (R) - S
SN1 series - Size 10 Receptacle - 12 Female Contacts - Silver Plating contact
- SN2A - 10 - 2 - S
SN2A series - Size 10 Adapter - 2 contact - Silver Plating contact
- SN - 8 - 4 (LRPCB)K - S
SN series - Size 8 - 4 contact (Right-angle PCB receptacle, Any type) - Silver Plating contact

Connector Series (Prefix)

- SN - SN series
- SNH - Reverse contact
- SN1 - Clamp type plug
- SN1H - Clamp type & reverse contact plug
- SNA - Adapter for SN series
- SNHA - Adapter for SNH series
- SN2 - Screw-on type
- SN2A - Adapter for SN2 series

Size **Option**

8,10 B : Black plug housing

No. of Contacts

8 Size : 4,5,6 10 Size : 2,3,4,9,10,12

Body Type

P : Plug PL : Right-angle plug

PS : Short Plug Housing

R : Receptacle (solder termination)

RPCB : Receptacle (PCB termination)

LRPCB : Right-angle Receptacle (PCB)

blank : Adapter

Option

S : Silver Plating contact

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Major Performances / Contact Arrangements

| Performance | Size 8 | |
|--|----------|----------|
| | 4 | 5 |
| Withstanding Voltage (per min) ¹ | AC 300V | AC 300V |
| Current | 2A | 2A |
| Insulation Resistance (Minimum) ² | 1,000M Ω | 1,000M Ω |
| Contact Resistance (Maximum) ³ | 10m Ω | 10m Ω |
| Solder Pot Inside Diameter | ∅ 0,7 | ∅ 0,7 |
| Wire Gauge (Maximum) | AWG26 | AWG26 |
| Contact Arrangement | | |

| Performance | Size 10 | | | | | |
|--|----------|----------|----------|----------|----------|----------|
| | 2 | 3 | 4 | 9 | 10 | 12 |
| Withstanding Voltage (per min) ¹ | AC 500V | AC 500V | AC 500V | AC 300V | AC 300V | AC 300V |
| Current | 3A | 3A | 3A | 2A | 2A | 2A |
| Insulation Resistance (Minimum) ² | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω |
| Contact Resistance (Maximum) ³ | 10m Ω | 10m Ω | 10m Ω | 10m Ω | 10m Ω | 10m Ω |
| Solder Pot Inside Diameter | ∅ 1,0 | ∅ 1,0 | ∅ 1,0 | ∅ 0,7 | ∅ 0,7 | ∅ 0,7 |
| Wire Gauge (Maximum) | AWG20 | AWG20 | AWG20 | AWG26 | AWG26 | AWG26 |
| Contact Arrangement | | | | | | |

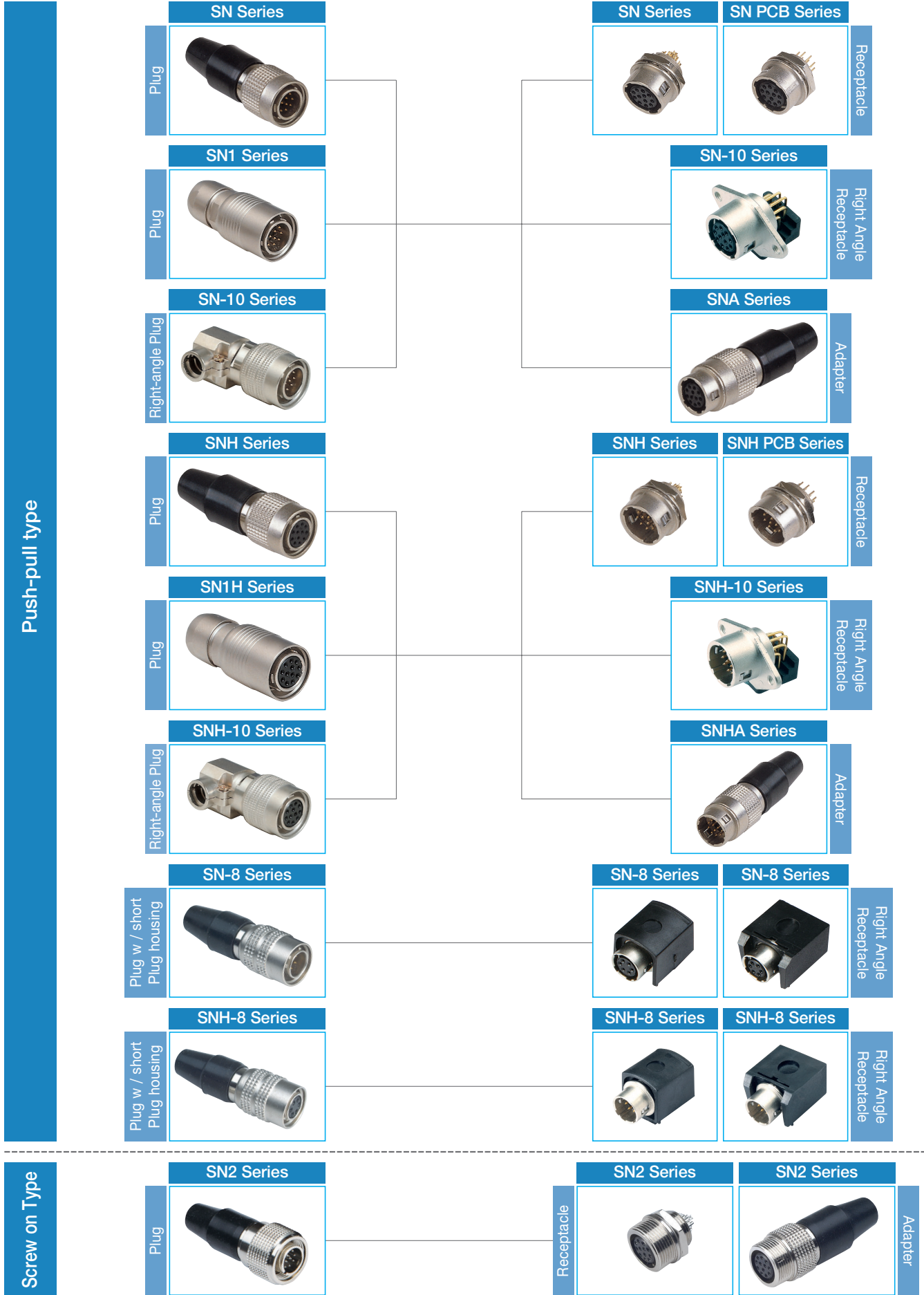
¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
 • Specifications subject to change without notice.
 • Consult Sam Woo Electronics for the latest specifications.
⁴ Connector contact arrangement is from mating surface.

Contact Diameter
 ∅ 0,55mm ∅ 1,0mm

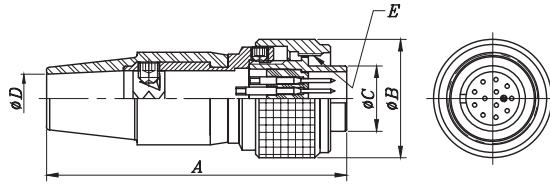
■ Material Used / Finish

| | Material | Finish |
|-----------|----------------------|-----------------|
| Body | Zinc alloy and brass | Ni Plating |
| Insulator | PA | Black |
| Contacts | Male | Brass |
| | Female | Phosphor bronze |

SN Series Mini-map

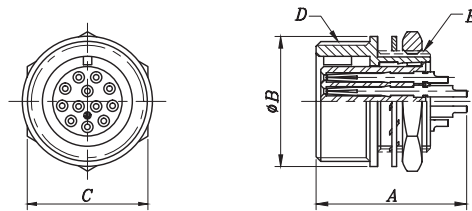


■ SN2 Plug



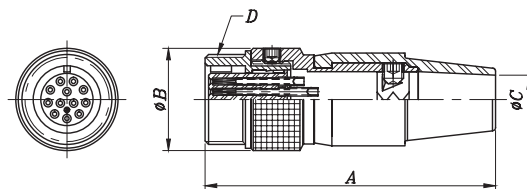
| Product Number | A | φ B | φ C | φ D | E | Product Number | A | φ B | φ C | φ D | E |
|----------------|---------------|-----|-----|-----|-----------|----------------|------|------|-----|-----|-----------|
| SN2-8-4 (P) | 35,1 | 12 | 7 | 5,1 | M10×0,75P | SN2-10-2 (P) | 43,0 | 17,0 | 9,4 | 7,0 | M13×0,75P |
| SN2-8-5 (P) | | | | | | SN2-10-3 (P) | | | | | |
| SN2-8-6 (P) | | | | | | SN2-10-4 (P) | | | | | |
| | SN2-10-9 (P) | | | | | | | | | | |
| | SN2-10-10 (P) | | | | | | | | | | |
| | SN2-10-12 (P) | | | | | | | | | | |

■ SN2 Receptacle



| Product Number | A | φ B | C | D | E | Product Number | A | φ B | C | D | E |
|----------------|---------------|------|----|-----------|---------|----------------|------|-----|----|-----------|-----------|
| SN2-8-4 (R) | 14,4 | 10,9 | 10 | M10×0,75P | M8×0,5P | SN2-10-2 (R) | 16,5 | 14 | 13 | M13×0,75P | M11×0,75P |
| SN2-8-5 (R) | | | | | | SN2-10-3 (R) | | | | | |
| SN2-8-6 (R) | | | | | | SN2-10-4 (R) | | | | | |
| | SN2-10-9 (R) | | | | | | | | | | |
| | SN2-10-10 (R) | | | | | | | | | | |
| | SN2-10-12 (R) | | | | | | | | | | |

■ SN2A Adapter

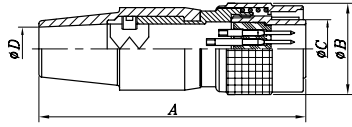


| Product Number | A | φ B | φ C | D | Product Number | A | φ B | φ C | D |
|----------------|------------|------|-----|-----------|----------------|------|------|-----|-----------|
| SN2A-8-4 | 41,7 | 14,7 | 7,0 | M13×0,75P | SN2A-10-2 | 41,7 | 14,7 | 7,0 | M13×0,75P |
| SN2A-8-5 | | | | | SN2A-10-3 | | | | |
| SN2A-8-6 | | | | | SN2A-10-4 | | | | |
| | SN2A-10-9 | | | | | | | | |
| | SN2A-10-10 | | | | | | | | |
| | SN2A-10-12 | | | | | | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

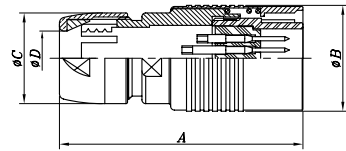
SN Series Push-pull type SN Male Plug

■ SN Plug



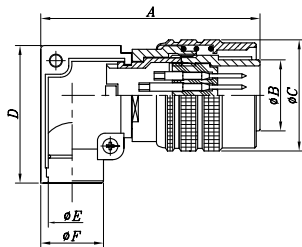
| Product Number | A | ø B | ø C | ø D |
|----------------|----|------|-----|-----|
| SN-8-4(P) | 35 | 11,5 | 7 | 5 |
| SN-8-5(P) | | | | |
| SN-8-6(P) | | | | |
| SN-10-2(P) | 43 | 14,9 | 9,4 | 7 |
| SN-10-3(P) | | | | |
| SN-10-4(P) | | | | |
| SN-10-9(P) | | | | |
| SN-10-10(P) | | | | |
| SN-10-12(P) | | | | |

■ SN1 Plug



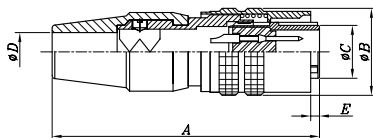
| Product Number | A | ø B | ø C | ø D |
|----------------|----|------|------|-----|
| SN1-8-4(P) | 28 | 11,0 | 9,0 | 5,2 |
| SN1-8-5(P) | | | | |
| SN1-8-6(P) | | | | |
| SN1-10-2(P) | 32 | 14,0 | 12,0 | 7,2 |
| SN1-10-3(P) | | | | |
| SN1-10-4(P) | | | | |
| SN1-10-9(P) | | | | |
| SN1-10-10(P) | | | | |
| SN1-10-12(P) | | | | |

■ SN Right-Angle Plug



| Product Number | A | ø B | ø C | D | ø E | ø F |
|----------------|------|-----|------|------|-----|-----|
| SN-8-4(PL) | 25,9 | 7,0 | 11,5 | 14,6 | 5,0 | 6,6 |
| SN-8-5(PL) | | | | | | |
| SN-8-6(PL) | | | | | | |
| SN-10-9(PL) | 29,0 | 9,4 | 14,9 | 18,2 | 6,3 | 8,3 |
| SN-10-10(PL) | | | | | | |
| SN-10-12(PL) | | | | | | |

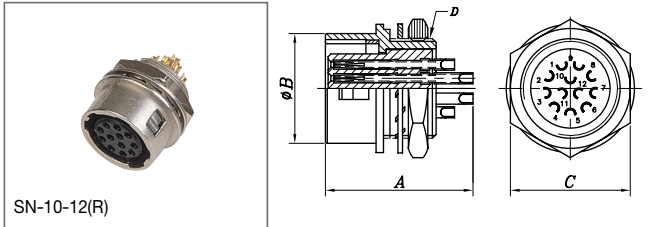
■ SN Plug (Short plug housing)



| Product Number | A | ø B | ø C | ø D | E |
|----------------|------|------|-----|-----|-----|
| SN-8-4(PS) | 35,0 | 11,5 | 7,0 | 5,1 | 0,6 |
| SN-8-6(PS) | | | | | |

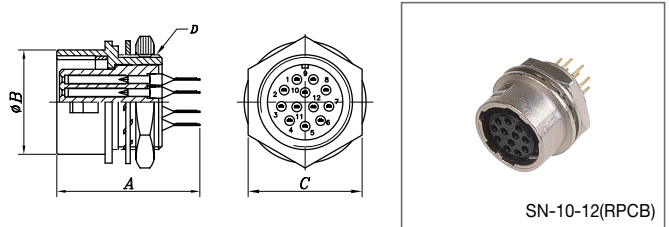
Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

■ SN Receptacle



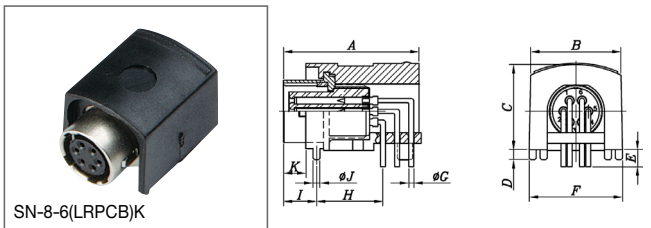
| Product Number | A | Ø B | C | D | Product Number | A | Ø B | C | D |
|----------------|-------------|-----|------|---------|----------------|------|------|-----------|------|
| SN-8-4 (R) | 14,5 | 8,8 | 10,0 | M8×0,5P | SN-10-2 (R) | 11,9 | 13,0 | M11×0,75P | |
| SN-8-5 (R) | | | | | SN-10-3 (R) | | | | 15 |
| SN-8-6 (R) | | | | | SN-10-4 (R) | | | | 16,5 |
| | SN-10-9(R) | | | | | | | | |
| | SN-10-10(R) | | | | | | | | |
| | | | | | SN-10-12(R) | | | | |

■ SN PCB Receptacle



| Product Number | A | Ø B | C | D | Product Number | A | Ø B | C | D |
|----------------|----------------|-----|----|---------|----------------|------|------|----|-----------|
| SN-8-4 (RPCB) | 15,7 | 8,8 | 10 | M8×0,5P | SN-10-2 (RPCB) | 16,2 | 11,9 | 13 | M11×0,75P |
| SN-8-5 (RPCB) | | | | | SN-10-3 (RPCB) | | | | |
| SN-8-6 (RPCB) | | | | | SN-10-4 (RPCB) | | | | |
| | SN-10-9(RPCB) | | | | | | | | |
| | SN-10-10(RPCB) | | | | | | | | |
| | | | | | SN-10-12(RPCB) | | | | |

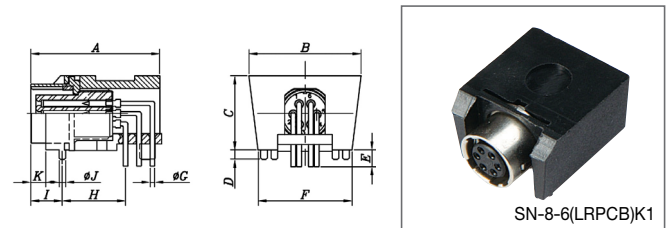
■ SN Right Angle PCB Receptacle (Any Type)



| Product Number | A | B | C | D | E | F | Ø G | H | I | Ø J | K |
|-----------------|------|------|------|-----|-----|------|-----|-----|-----|-----|-----|
| SN-8-4 (LRPCB)K | 19,2 | 12,8 | 12,0 | 1,3 | 2,4 | 13,2 | 0,7 | 9,4 | 4,7 | 1,0 | 3,2 |
| SN-8-6 (LRPCB)K | | | | | | | | | | | |

! SN-8-4(LRPCB)K1, SN-8-6(LRPCB)K1 only mates with SN-8-4(PS), SN-8-6(PS) plugs.

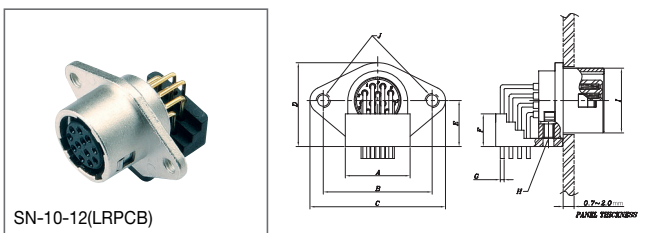
■ SN Right Angle PCB Receptacle (Magic Type)



| Product Number | A | B | C | D | E | F | Ø G | H | I | Ø J | K |
|-----------------|------|------|------|-----|-----|------|-----|-----|-----|-----|-----|
| SN-8-4(LRPCB)K1 | 19,2 | 16,7 | 11,0 | 1,3 | 2,4 | 14,0 | 0,7 | 9,4 | 4,7 | 1,0 | 2,2 |
| SN-8-6(LRPCB)K1 | | | | | | | | | | | |

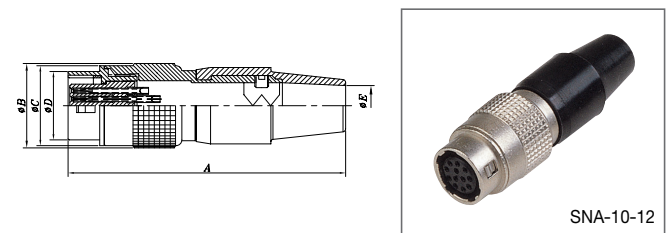
! SN-8-4(LRPCB)K1, SN-8-6(LRPCB)K1 only mates with SN-8-4(PS), SN-8-6(PS) plugs.

■ SN Right Angle PCB Receptacle

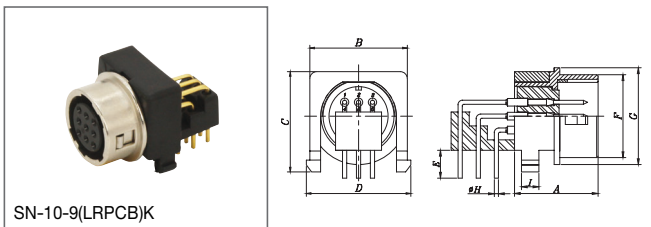


| Product Number | A | B | C | D | E | F | Ø G | H | Ø I | J |
|-----------------|------|----|------|------|-----|---|-----|---------------|------|----------------|
| SN-10-12(LRPCB) | 11,9 | 20 | 24,9 | 15,4 | 8,5 | 6 | 0,7 | M2,0 ×0,4P | 11,9 | M2,6 ×0,45P |

■ SNA Adapter



| Product Number | A | Ø B | Ø C | Ø D | Ø E | Product Number | A | Ø B | Ø C | Ø D | Ø E |
|----------------|----------|------|------|-----|-----|----------------|------|------|------|------|-----|
| SNA-8-4 | 40,2 | 11,5 | 10,9 | 8,8 | 5,1 | SN-10-2 | 48,0 | 14,9 | 13,9 | 11,9 | 7,0 |
| SNA-8-5 | | | | | | SN-10-3 | | | | | |
| SNA-8-6 | | | | | | SN-10-4 | | | | | |
| | SN-10-9 | | | | | | | | | | |
| | SN-10-10 | | | | | | | | | | |
| | SN-10-12 | | | | | | | | | | |

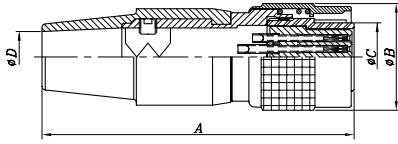


| Product Number | A | B | C | D | E | F | G | Ø H | I |
|-----------------|----|----|------|----|---|------|------|-----|-----|
| SN-10-9(LRPCB)K | 12 | 14 | 14,3 | 15 | 3 | 11,9 | 13,9 | 0,7 | 2,5 |

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

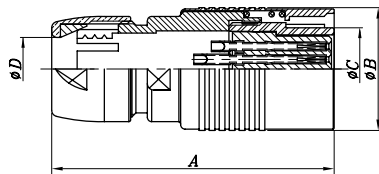
SN Series Push-pull type SNH Female Plug

■ SNH Plug



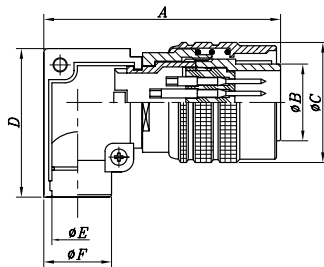
| Product Number | A | Ø B | Ø C | Ø D |
|----------------|----|------|-----|-----|
| SNH-8-4(P) | 35 | 11,5 | 7 | 5 |
| SNH-8-5(P) | | | | |
| SNH-8-6(P) | | | | |
| SNH-10-2(P) | 43 | 14,9 | 9,4 | 7 |
| SNH-10-3(P) | | | | |
| SNH-10-4(P) | | | | |
| SNH-10-9(P) | | | | |
| SNH-10-10(P) | | | | |
| SNH-10-12(P) | | | | |

■ SN1H Plug



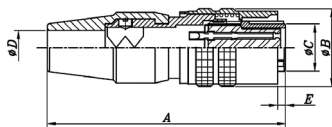
| Product Number | A | Ø B | Ø C | Ø D |
|----------------|----|------|------|-----|
| SN1H-8-4(P) | 28 | 11,0 | 9,0 | 5,2 |
| SN1H-8-5(P) | | | | |
| SN1H-8-6(P) | | | | |
| SN1H-10-2(P) | 32 | 14,0 | 12,0 | 7,2 |
| SN1H-10-3(P) | | | | |
| SN1H-10-4(P) | | | | |
| SN1H-10-9(P) | | | | |
| SN1H-10-10(P) | | | | |
| SN1H-10-12(P) | | | | |

■ SNH Right Angle Plug



| Product Number | A | Ø B | Ø C | D | Ø E | Ø F |
|----------------|------|-----|------|------|-----|-----|
| SNH-8-4(PL) | 25,9 | 7,0 | 11,5 | 14,6 | 5,0 | 6,6 |
| SNH-8-5(PL) | | | | | | |
| SNH-8-6(PL) | | | | | | |
| SNH-10-9(PL) | 29,0 | 9,4 | 14,9 | 18,2 | 6,3 | 8,3 |
| SNH-10-10(PL) | | | | | | |
| SNH-10-12(PL) | | | | | | |

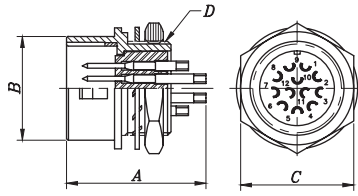
■ SNH Plug (Short plug housing)



| Product Number | A | Ø B | Ø C | Ø D | E |
|----------------|------|------|-----|-----|-----|
| SNH-8-4(PS) | 35,0 | 11,5 | 7,0 | 5,1 | 0,6 |
| SNH-8-6(PS) | | | | | |

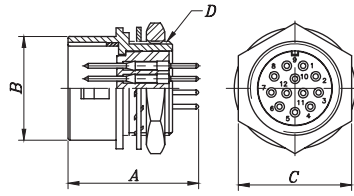
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SNH Receptacle



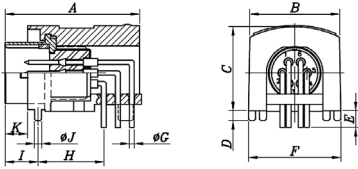
| Product Number | A | φ B | C | D | Product Number | A | φ B | C | D |
|----------------|--------------|-----|------|---------|----------------|------|------|------|-----------|
| SNH-8-4 (R) | 14.2 | 8.8 | 10.0 | M8×0.5P | SNH-10-2(R) | 16.2 | 11.9 | 13.0 | M11×0.75P |
| SNH-8-5 (R) | | | | | SNH-10-3(R) | | | | |
| SNH-8-6 (R) | | | | | SNH-10-4(R) | | | | |
| | SNH-10-9(R) | | | | | | | | |
| | SNH-10-10(R) | | | | | | | | |
| | SNH-10-12(R) | | | | | | | | |

■ SNH PCB Receptacle



| Product Number | A | φ B | C | D | Product Number | A | φ B | C | D |
|----------------|-----------------|-----|----|---------|----------------|----|------|----|-----------|
| SNH-8-4(RPCB) | 15 | 8.8 | 10 | M8×0.5P | SNH-10-2(RPCB) | 15 | 11.9 | 13 | M11×0.75P |
| SNH-8-5(RPCB) | | | | | SNH-10-3(RPCB) | | | | |
| SNH-8-6(RPCB) | | | | | SNH-10-4(RPCB) | | | | |
| | SNH-10-9(RPCB) | | | | | | | | |
| | SNH-10-10(RPCB) | | | | | | | | |
| | SNH-10-12(RPCB) | | | | | | | | |

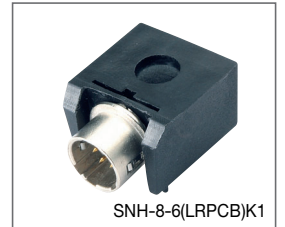
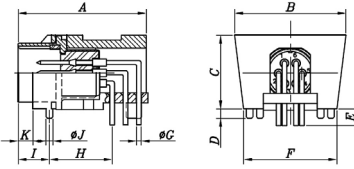
■ SNH Right Angle PCB Receptacle (Any Type)



| Product Number | A | B | C | D | E | F | φ G | H | I | φ J | K |
|-----------------|------|------|------|-----|-----|------|-----|-----|-----|-----|-----|
| SNH-8-4(LRPCB)K | 19.2 | 12.8 | 12.0 | 1.3 | 2.4 | 13.2 | 0.7 | 9.4 | 4.7 | 1.0 | 3.2 |
| SNH-8-6(LRPCB)K | | | | | | | | | | | |

! SNH-8-4(LRPCB)K1, SNH-8-6(LRPCB)K1 only mates with SNH-8-4(PS), SNH-8-6(PS) plugs.

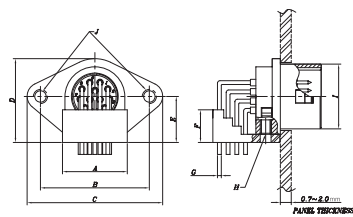
■ SNH Right Angle PCB Receptacle (Magic Type)



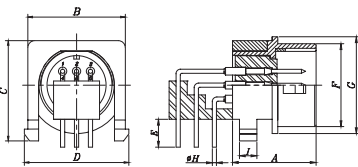
| Product Number | A | B | C | D | E | F | φ G | H | I | φ J | K |
|------------------|------|------|------|-----|-----|------|-----|-----|-----|-----|-----|
| SNH-8-4(LRPCB)K1 | 19.2 | 16.7 | 11.0 | 1.3 | 2.4 | 14.0 | 0.7 | 9.4 | 4.7 | 1.0 | 2.2 |
| SNH-8-6(LRPCB)K1 | | | | | | | | | | | |

! SNH-8-4(LRPCB)K1, SNH-8-6(LRPCB)K1 only mates with SNH-8-4(PS), SNH-8-6(PS) plugs.

■ SNH Right Angle PCB Receptacle

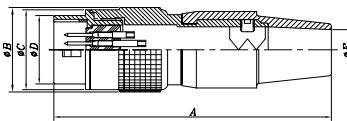


| Product Number | A | B | C | D | E | F | φ G | H | φ I | J |
|------------------|------|----|------|------|-----|---|-----|---------------|------|----------------|
| SNH-10-12(LRPCB) | 11.9 | 20 | 24.9 | 15.4 | 8.5 | 6 | 0.7 | M2.0 ×0.4P | 11.9 | M2.6 ×0.45P |



| Product Number | A | B | C | D | E | F | G | φ H | I |
|------------------|----|----|------|----|---|------|------|-----|-----|
| SNH-10-9(LRPCB)K | 12 | 14 | 14.3 | 15 | 4 | 11.9 | 13.9 | 0.7 | 2.5 |

■ SNHA Adapter



| Product Number | A | φ B | φ C | φ D | φ E | Product Number | A | φ B | φ C | φ D | φ E |
|----------------|------------|------|------|-----|-----|----------------|------|------|------|------|-----|
| SNHA-8-4 | 40.2 | 11.5 | 10.9 | 8.8 | 5.1 | SNHA-10-2 | 48.0 | 14.9 | 13.9 | 11.9 | 7.0 |
| SNHA-8-5 | | | | | | SNHA-10-3 | | | | | |
| SNHA-8-6 | | | | | | SNHA-10-4 | | | | | |
| | SNHA-10-9 | | | | | | | | | | |
| | SNHA-10-10 | | | | | | | | | | |
| | SNHA-10-12 | | | | | | | | | | |

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

General Instruction / Information

- Diagram 1 shows a sample wiring for SN series.
- Soldering must be done quickly and carefully to prevent damage to insulator.
- Receptacles do not require additional instructions.
- Specification of Nut

| Size | Nut Specification | Nut Tightening force |
|---------|-------------------|----------------------|
| SN - 8 | M8 × 0,5P | 15~18(kgf · cm) |
| SN - 10 | M11 × 0,75P | 20~23(kgf · cm) |

Wiring Sequence

- ① Select cable according to outer diameter and cross section, lower than 0,129mm²(AWG#26).
- ② Insert RUBBER BUSHING to cable.
- ③ Insert PLUG HOUSING to cable.
- ④ Strip cable per dimension given and loosen braid.
- ⑤ Secure PLUG BODY to jig for soldering.
- ⑥ Solder stripped cable to pin.
- ⑦ Fasten CRIMP using hand crimp tool (SA-HCT^①)
- ⑧ Lock PLUG HOUSING and PLUG BODY using tightening force displayed on Table 1.
- ⑨ Tighten WRENCH BOLT using 0.3N force onto one of two embossed parts of crimp.
- ⑩ Cover RUBBER BUSHING onto PLUG HOUSING.

^① See below for information on SA-HCT.

Diagram 1

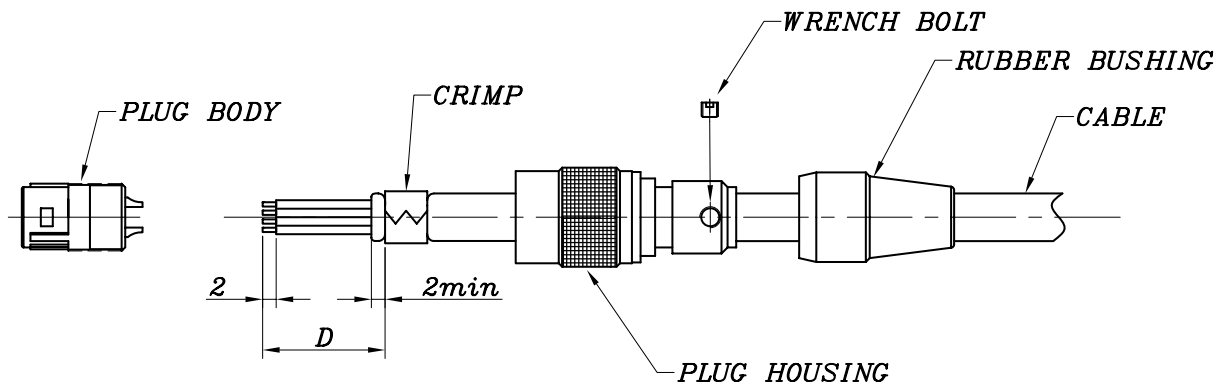


Table 1

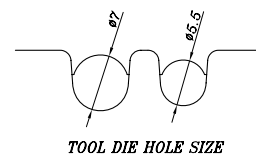
| Size | Spanner Jaw | D (Dimension) | Tightening Force | Notes |
|---------|-------------|---------------|-----------------------|------------------------|
| SN - 8 | 8 | 10 | 1,5N · m (15kgf · cm) | SA-HCT size ϕ 5,5 |
| SN - 10 | 10 | 16 | 2,0N · m (20kgf · cm) | SA-HCT size ϕ 7,0 |

unit : mm

SA-HCT (Hand Crimp Tool)

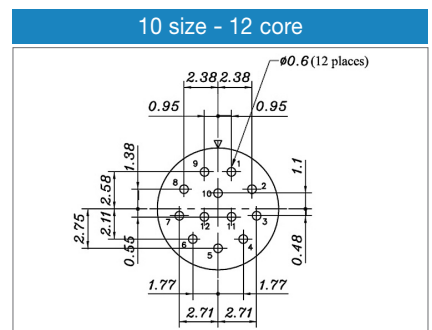
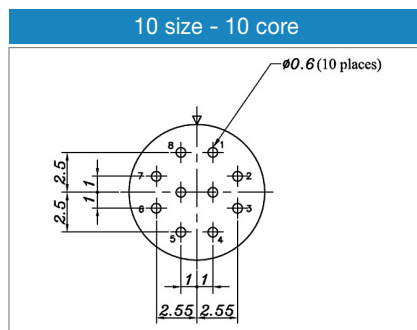
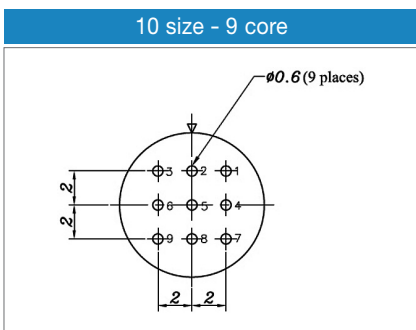
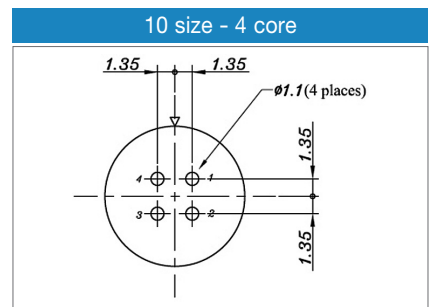
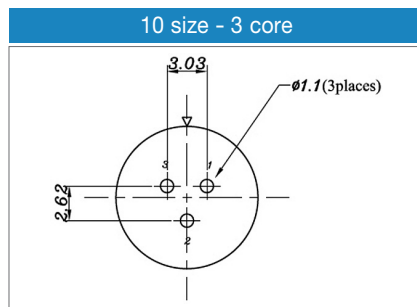
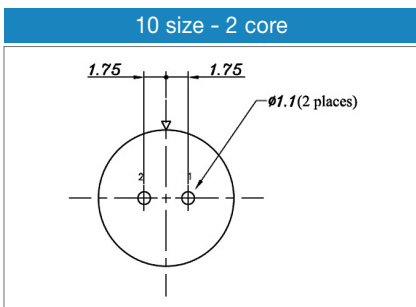
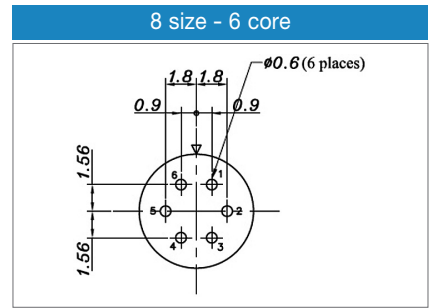
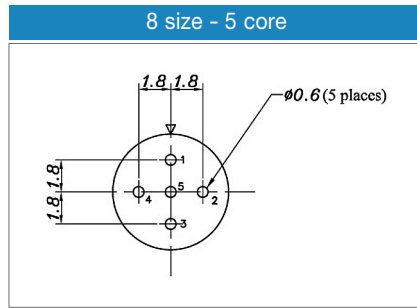
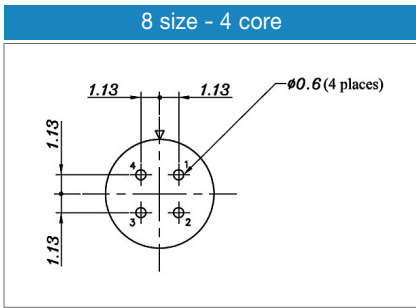


Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.

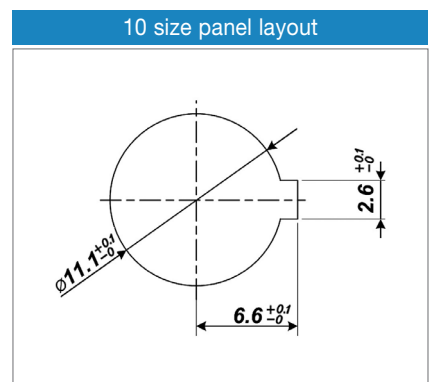
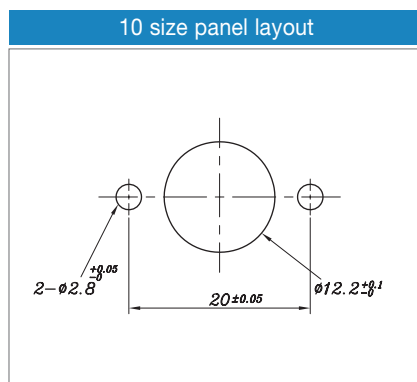
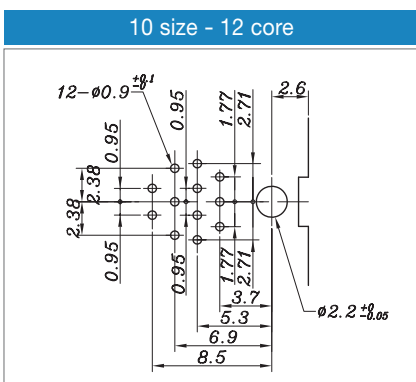
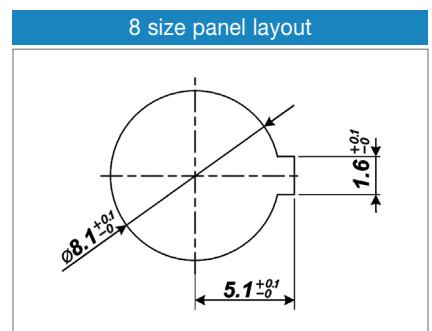
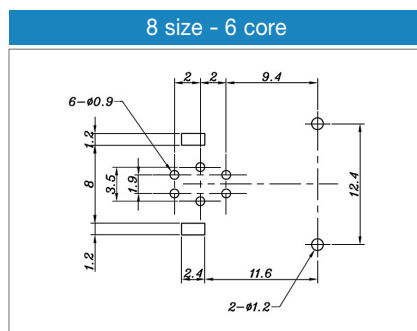
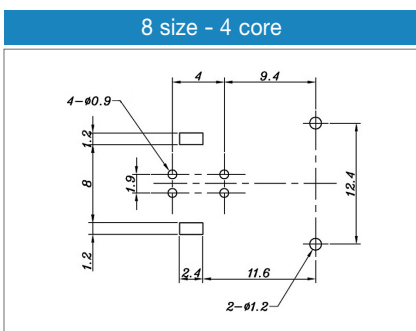


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SN Receptacle PCB Hole Layout



■ SN Receptacle Right Angle PCB Hole Layout



■ SN Receptacle Panel Layout

SN Series Cable Assembly



Features

- Push-pull technology
- Miniature circular
- Light weight
- Low cost
- Standard and Custom Design

Applications

- Professional audio and video
- CCTV system
- Portable wireless radio
- Factory Automation
- Computers and peripherals
- Medical, and much more.

Part Numbering



Drawing Number
Optional Suffix (Omissible)
 1,2,3
 To indicate modification of original
Cable Length : 3 Digits
 Unit { Plug : m
 Recep : cm
 Ex) Using 3m Cable for Plug : 003
 Using 30cm Cable for Recep : 030

Plug Cable Assembly



| Type | Construction |
|------|-------------------------------------|
| A | SN Connector + Cable + Housing |
| B | SN Connector + Cable + SN Connector |

※ Design and Customization Service Available

Receptacle Cable Assembly



| Type | Construction |
|------|---|
| A | SN Connector + wire + open end |
| B | SN Connector + wire + Housing |
| C | SN Connector + wire + Housing with core |

※ Design and Customization Service Available


Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.



SP Series Part Numbering



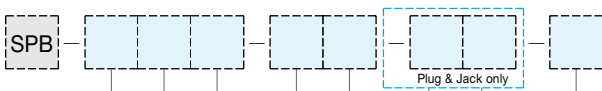
Features

- Push-pull self latching technology
- Ultra precision
- High contact density
- High reliability / durability
- High vibration and outer force resistance
- UL Recognized 

Applications

- Telecommunications
- Professional A/V
- HDTV panel system
- Vision related equipment
- and much more
- Optical testing equipment
- Portable wireless radio
- CCTV
- Medical equipment

■ SPB Part Numbering - Mechanical keying system



Ordering Part Number
(see examples)



Size

00,0,1,2,3

Body Type

P : Plug
 LP : Right-angle plug type
 PS : Plug (Non-latch sleeve)
 PT : Plug-threaded type
 PT1 : Plug-threaded type & crimp type

J : Jack

R : Receptacle

BR : Bulkhead Receptacle

R9 : Two-Nut Receptacle

RS : Insertion Receptacle type

RT : Receptacle-threaded type

RT1 : Right-angle Receptacle-threaded type

RT2 : Right-angle Receptacle-threaded type+H cut

! To order Nut for receptacle separately, see page 74

Key Angles

See page 65

Contact Code

See page 56

Contact Type

P : Male S : Female
 LSB : Right-angle PCB Female
 SB : PCB Female

Screw Cap Code (Plug and Jack only)

A : Screw Cap Terminated
 B : Screw Cap + Boot type
 C : Nut Terminated

Collet Code (Plug and Jack only)

See page 66

Material and Female Contact Cut Code

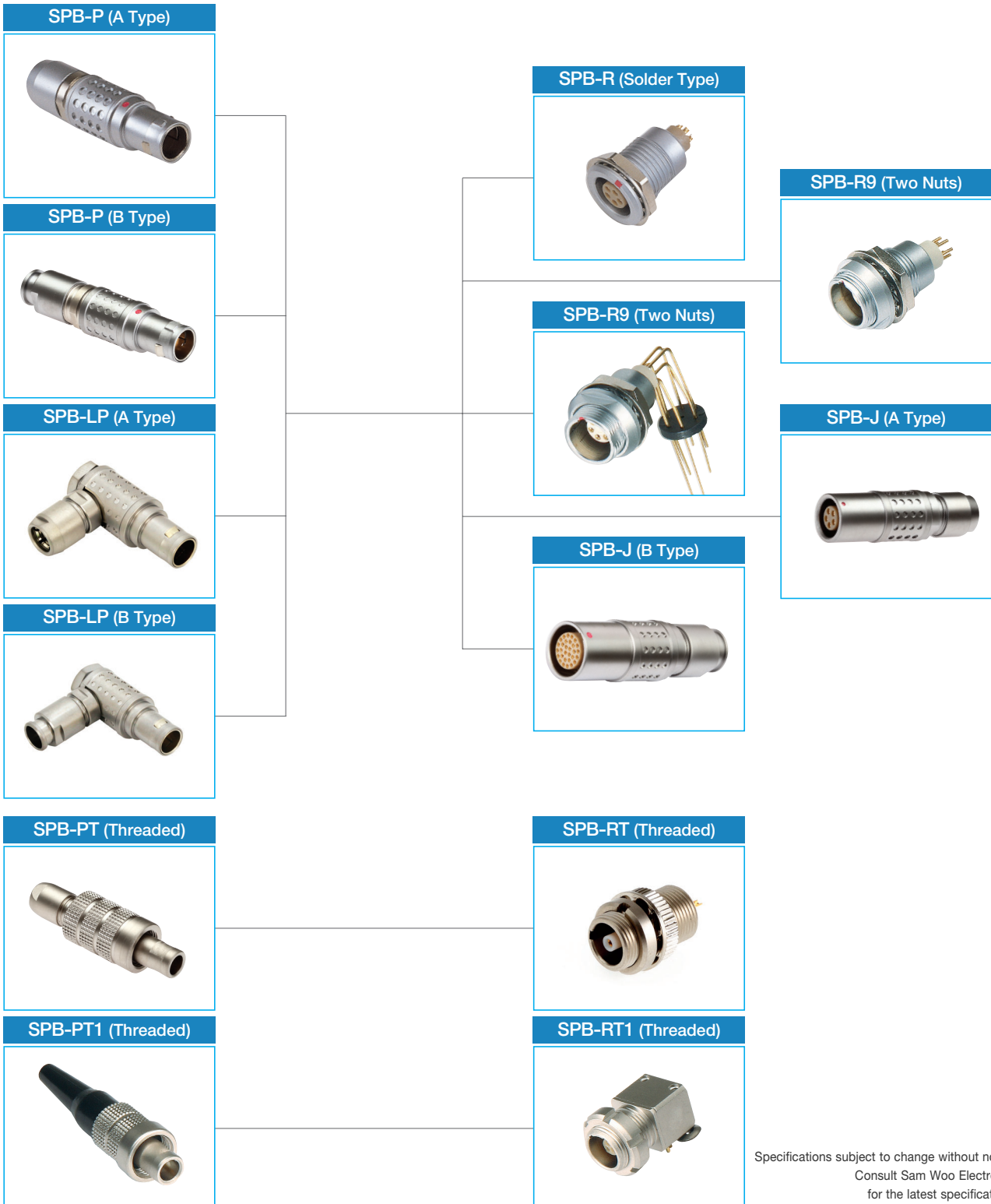
See page 66

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

■ Performance

| Performance | Endurance | Humidity | Temperature Range | Vibration Resistance | Shock Resistance | Corrosion Test | Mated IP Rating |
|-------------|---------------|----------------|-------------------|----------------------|------------------|----------------|-----------------|
| Value | >5,000 cycles | 95%rh 140°F | -67°F +482°F | 10~2000Hz, 15g | 100g, 6ms | >144h | IP50 |

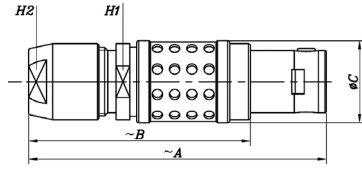
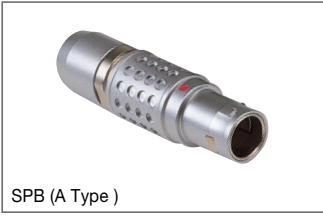
■ Mini-map



Specifications subject to change without notice.
Consult Sam Woo Electronics
for the latest specifications.

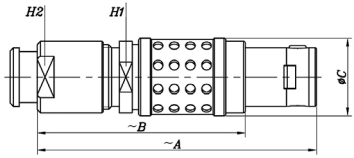
SP Series B Model Plug / Receptacle (Size & Shell Selection)

■ SPB Plug



| Product Number | | | | | | A | B | øC | H1 | H2 |
|----------------|----|---|---|---|--|------|------|------|------|------|
| SPB | 00 | P | P | A | | 28,5 | 20,5 | 7,0 | 5,5 | 5,0 |
| SPB | 0 | P | P | A | | 36,0 | 26,0 | 9,5 | 8,0 | 7,0 |
| SPB | 1 | P | P | A | | 43,0 | 32,0 | 12,0 | 10,9 | 9,0 |
| SPB | 2 | P | P | A | | 50,0 | 38,0 | 15,0 | 13,0 | 12,0 |
| SPB | 3 | P | P | A | | 58,0 | 43,0 | 18,0 | 15,0 | 14,0 |

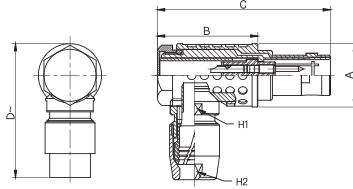
Material : Page 66
Collet code : Page 66
Contact code : Page 56



| Product Number | | | | | | A | B | øC | H1 | H2 |
|----------------|---|---|---|---|--|------|------|------|------|------|
| SPB | 0 | P | P | B | | 35,0 | 25,0 | 9,5 | 8,0 | 7,0 |
| SPB | 1 | P | P | B | | 42,0 | 33,0 | 12,0 | 10,0 | 9,0 |
| SPB | 2 | P | P | B | | 48,0 | 36,0 | 15,0 | 13,0 | 12,0 |
| SPB | 3 | P | P | B | | 56,5 | 41,5 | 18,0 | 15,0 | 14,0 |

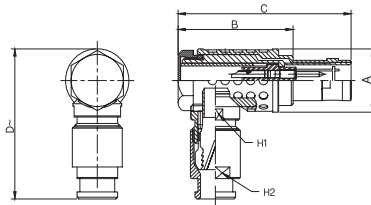
Material : Page 66
Collet code : Page 66
Contact code : Page 56

■ SPB Right-angle Plug



| Product Number | | | | | | øA | B | C | D | H1 | H2 |
|----------------|----|----|---|---|--|-------------|------|------|----|----|----|
| SPB | 00 | LP | P | A | | Coming soon | | | | | |
| SPB | 0 | LP | P | A | | 10,9 | 19,8 | 29,8 | 23 | 8 | 7 |
| SPB | 1 | LP | P | A | | 13,5 | 25 | 36 | 29 | 10 | 9 |
| SPB | 2 | LP | P | A | | Coming soon | | | | | |
| SPB | 3 | LP | P | A | | Coming soon | | | | | |

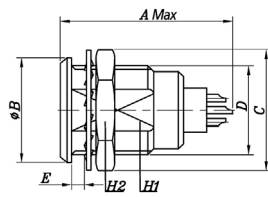
Material : Page 66
Collet code : Page 66
Contact code : Page 56



| Product Number | | | | | | øA | B | C | D | H1 | H2 |
|----------------|----|----|---|---|--|-------------|------|------|----|----|----|
| SPB | 00 | LP | P | B | | Coming soon | | | | | |
| SPB | 0 | LP | P | B | | 10,9 | 19,8 | 29,8 | 25 | 8 | 7 |
| SPB | 1 | LP | P | B | | 13,5 | 25 | 36 | 33 | 10 | 9 |
| SPB | 2 | LP | P | B | | Coming soon | | | | | |
| SPB | 3 | LP | P | B | | Coming soon | | | | | |

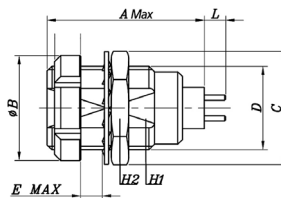
Material : Page 66
Collet code : Page 66
Contact code : Page 56

■ SPB Receptacle



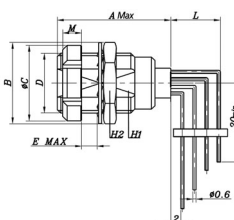
| Product Number | | | | | | A | øB | C | D | E | H1 | H2 |
|----------------|----|---|---|--|--|------|------|------|----------|------|------|------|
| SPB | 00 | R | S | | | 15,5 | 8,0 | 10,3 | M7×0,5P | 5,5 | 6,3 | 9,0 |
| SPB | 0 | R | S | | | 20,7 | 10,0 | 12,5 | M9×0,6P | 7,0 | 7,5 | 11,0 |
| SPB | 1 | R | S | | | 23,0 | 14,0 | 16,0 | M12×1,0P | 7,5 | 10,5 | 14,0 |
| SPB | 2 | R | S | | | 26,7 | 18,0 | 19,5 | M15×1,0P | 8,5 | 13,5 | 17,0 |
| SPB | 3 | R | S | | | 30,7 | 22,0 | 25,0 | M18×1,0P | 11,5 | 16,5 | 22,0 |

Material : Page 66
Contact code : Page 56



| Product Number | | | | | | A | øB | C | D | E | H1 | H2 |
|----------------|---|----|----|--|--|------|------|------|----------|-----|------|------|
| SPB | 0 | R9 | SB | | | 17,9 | 12,0 | 12,5 | M9×0,6P | 5,5 | 8,2 | 11,0 |
| SPB | 1 | R9 | SB | | | 19,8 | 16,0 | 16,0 | M12×1,0P | 6,0 | 10,5 | 14,0 |
| SPB | 2 | R9 | SB | | | 21,8 | 20,0 | 20,0 | M15×1,0P | 6,5 | 13,5 | 17,0 |
| SPB | 3 | R9 | SB | | | 25,8 | 24,0 | 25,0 | M18×1,0P | 9,0 | 16,5 | 22,0 |

Material : Page 66
Contact code : Page 56

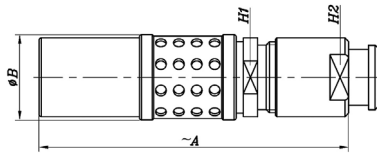
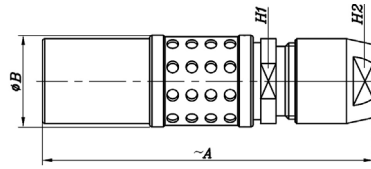


| Product Number | | | | | | A | B | øC | D | E | H1 | H2 |
|----------------|---|----|-----|--|--|------|------|------|----------|-----|------|------|
| SPB | 0 | R9 | LSB | | | 18,3 | 12,5 | 12,0 | M9×0,6P | 2,4 | 8,2 | 11,0 |
| SPB | 1 | R9 | LSB | | | 20,3 | 19,5 | 16,0 | M12×1,0P | 6,0 | 10,5 | 14,0 |
| SPB | 2 | R9 | LSB | | | 22,3 | 20,0 | 20,0 | M15×1,0P | 6,5 | 13,5 | 17,0 |
| SPB | 3 | R9 | LSB | | | 25,8 | 25,0 | 24,0 | M18×1,0P | 9,0 | 16,5 | 22,0 |

Material : Page 66
Contact code : Page 56

! Length (L) depends on number of contacts
For detailed information on Nut, refer to catalogue p.74

■ SPB Jack



| Product Number | | | | | | A | ϕB | H1 | H2 |
|----------------|----|---|---|---|--|------|----------|------|------|
| SPB | 00 | J | S | A | | 27,0 | 6,4 | 5,5 | 5,0 |
| SPB | 0 | J | S | A | | 35,5 | 9,5 | 8,0 | 7,0 |
| SPB | 1 | J | S | A | | 40,5 | 12,5 | 10,0 | 9,0 |
| SPB | 2 | J | S | A | | 47,0 | 16,5 | 13,0 | 12,0 |
| SPB | 3 | J | S | A | | 56,0 | 19,0 | 15,0 | 14,0 |

Material : Page 66
Collet code : Page 66
Contact code : Page 56

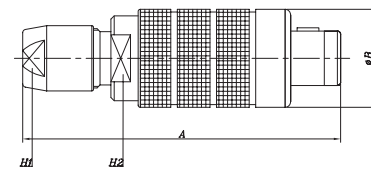
| Product Number | | | | | | A | ϕB | H1 | H2 |
|----------------|----|---|---|---|--|------|----------|------|------|
| SPB | 00 | J | S | B | | 26,0 | 6,4 | 5,5 | 5,0 |
| SPB | 0 | J | S | B | | 34,5 | 9,5 | 8,0 | 7,0 |
| SPB | 1 | J | S | B | | 39,5 | 12,5 | 10,0 | 9,0 |
| SPB | 2 | J | S | B | | 46,0 | 16,5 | 13,0 | 12,0 |
| SPB | 3 | J | S | B | | 54,5 | 19,0 | 15,0 | 15,0 |

Material : Page 66
Collet code : Page 66
Contact code : Page 56

B Model Screw Mounting Plug / Receptacle

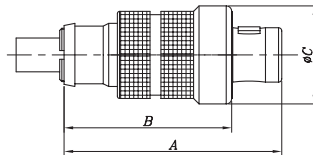
SP Series

■ SPB Plug (Threaded-mounting)



| Product Number | | | | | A | ϕB | H1 | H2 |
|----------------|----|----|---|---|------|----------|----|-----|
| SPB | 00 | PT | P | A | 29,2 | 9 | 5 | 6,5 |

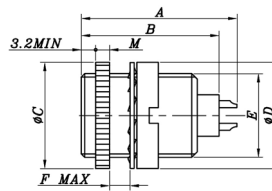
Material : Page 66
Collet code : Page 66
Contact code : Page 56
key angles : Page 65



| Product Number | | | | A | B | C | |
|----------------|----|-----|---|---|------|------|-----|
| SPB | 00 | PT1 | P | C | 20,0 | 15,4 | 9,0 |

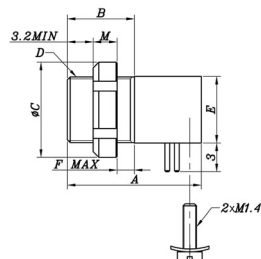
Material : Page 66
Collet code : Page 66
Contact code : Page 56
key angles : Page 65

■ SPB Receptacle (Threaded-mounting)



| Product Number | | | | | | | | A | B | C | ϕD | E | F | M |
|----------------|----|----|---|--|--|--|--|------|------|-----|----------|---------|-----|-----|
| SPB | 00 | RT | S | | | | | 15,5 | 13,7 | 9,5 | 9,0 | M7×0,5P | 4,2 | 2,0 |

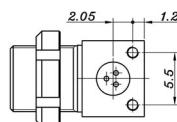
Material : Page 66
Contact code : Page 56



| Product Number | | | | | | | A | B | ϕC | D | E | F | M |
|----------------|----|-----|---|--|--|--|------|-----|----------|---------|-----|-----|-----|
| SPB | 00 | RT2 | S | | | | 14,0 | 7,0 | 10,0 | M7×0,5P | 7,0 | 1,8 | 2,5 |

Material : Page 66
Contact code : Page 56
key angles : Page 65
Body : Page 52

! For detailed information on Nut, refer to catalogue p.74



Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

SP Series B Model Contact Code

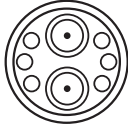
■ Contact Code

| Series & Model | Size | Contact Code | Current | Contact ϕ | No. of Contacts | Wire Gauge (Maximum) | Contact Arrangement | | | |
|----------------|------|--------------|-----------------|-----------------|-----------------|----------------------|---------------------|----------------------|---------------------|--|
| SPB | 00 | 250 | 4A | 50 | 1-2-5-6 | 1,09+11.f | | | | |
| Series & Model | Size | Contact | | | Current | Contact ϕ | No. of Contacts | Wire Gauge (Maximum) | Contact Arrangement | |
| | | Code | Type | | | | | | | |
| | | | S ¹⁾ | C ²⁾ | P ³⁾ | | | | | |
| SPB | 00 | 302 | ○ | | ○ | 5A | 0,5 | 2 | AWG 28 | |
| | | 303 | ○ | | ○ | 3A | 0,5 | 3 | AWG 28 | |
| | | 304 | ○ | | ○ | 2A | 0,5 | 4 | AWG 28 | |
| | 0 | 302 | ○ | | ○ | 10A | 0,9 | 2 | AWG 22 | |
| | | 303 | ○ | | ○ | 8A | 0,9 | 3 | AWG 22 | |
| | | 304 | ○ | | ○ | 7A | 0,7 | 4 | AWG 24 | |
| | | 305 | ○ | | ○ | 6,5A | 0,7 | 5 | AWG 24 | |
| | | 306 | ○ | | ○ | 2,5A | 0,7 | 6 | AWG 26 | |
| | | 307 | ○ | | ○ | 2,5A | 0,7 | 7 | AWG 26 | |
| | | 309 | ○ | | ○ | 2A | 0,5 | 9 | AWG 26 | |
| | 1 | 302 | ○ | | ○ | 15A | 1,3 | 2 | AWG 20 | |
| | | 303 | ○ | | ○ | 12A | 1,3 | 3 | AWG 20 | |
| | | 304 | ○ | ○ | ○ | 10A | 0,9 | 4 | AWG 20 | |
| | | 305 | ○ | | ○ | 9A | 0,9 | 5 | AWG 20 | |
| | | 306 | ○ | | ○ | 7A | 0,7 | 6 | AWG 24 | |
| | | 307 | ○ | | ○ | 7A | 0,7 | 7 | AWG 24 | |
| | | 308 | ○ | | ○ | 5A | 0,7 | 8 | AWG 24 | |
| | | 314 | ○ | | ○ | 2A | 0,5 | 14 | AWG 28 | |
| | | 316 | ○ | | ○ | 1,5A | 0,5 | 16 | AWG 28 | |
| | 2 | 308 | ○ | ○ | ○ | 10A | 0,9 | 8 | AWG 22 | |
| | | 310 | ○ | ○ | ○ | 8A | 0,9 | 10 | AWG 22 | |
| | 3 | 330 | ○ | | ○ | 3,5A | 0,7 | 30 | AWG 22 | |

Contact Type : S¹⁾-Solder C²⁾-Crimp P³⁾-PCB

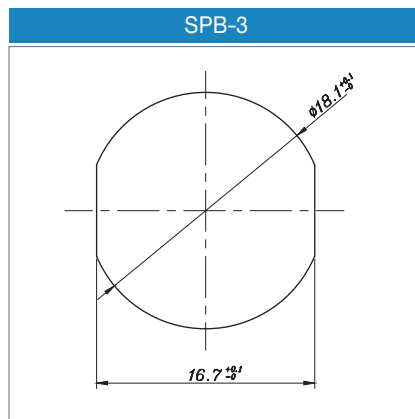
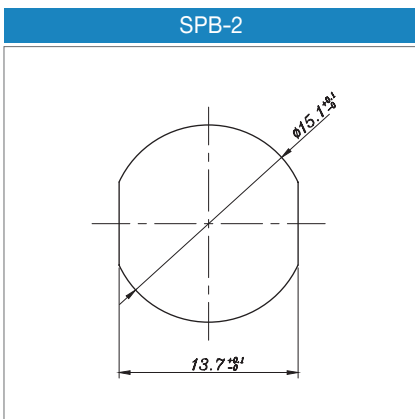
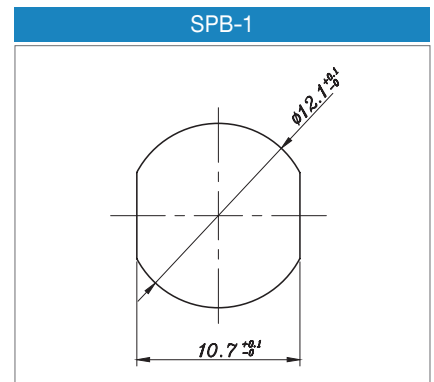
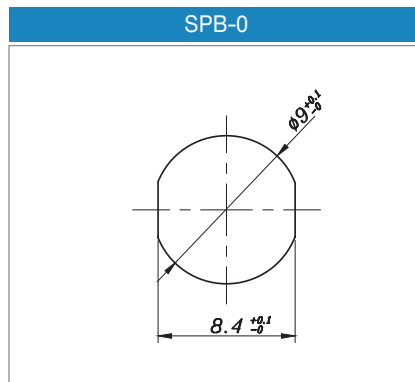
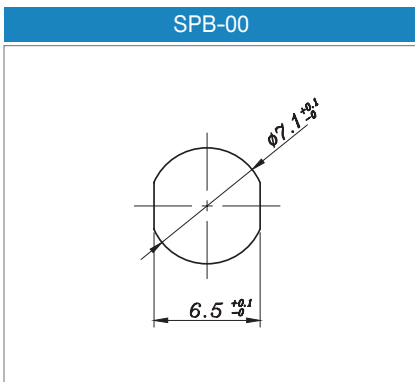
Note : Connector contact arrangement is from mating surface.

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

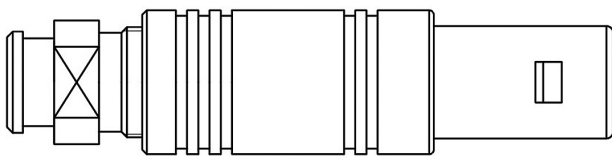
| Series & Model | Size | Contact Code | Number of Contacts | Contact ϕ | Current | Coax cable group /Wire max AWG | Coax Impedance & Contact Type | Contact Arrangement |
|----------------|------|--------------|--------------------|----------------|---------|--------------------------------|-------------------------------|---|
| SPB | 3 | 846 | 2 coax | 0.7 | 2A | 1-2-3 | 50 Ω Type C |  |
| | | | 6LV | 0.9 | 8A | AWG 22 | | |

Note : Connector contact arrangement is from mating surface.

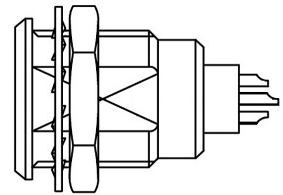
■ SPB Series Panel Layout



SP Series S Model Part Numbering



SPS Series



■ SPS Part Numbering - Hermaphroditic keying system



Size
00,0,1,2,3

Body Type
P : Plug J : Jack
R : Receptacle R9 : Two-Nut Receptacle
RT : Receptacle-Threaded type
LP : Plug With Right Angle Contact

Contact Code
See page 61

Contact Type
P : Male S : Female
SP : Female and Male
SPB : PCB Female and Male
LSB : Right-angle PCB Female
LSPB : Right-angle PCB Female and Male

Screw Cap Code (Plug and Jack only)
A : Screw Cap Terminated
B : Screw Cap + Boot type

Collet Code (Plug and Jack only)
See page 66

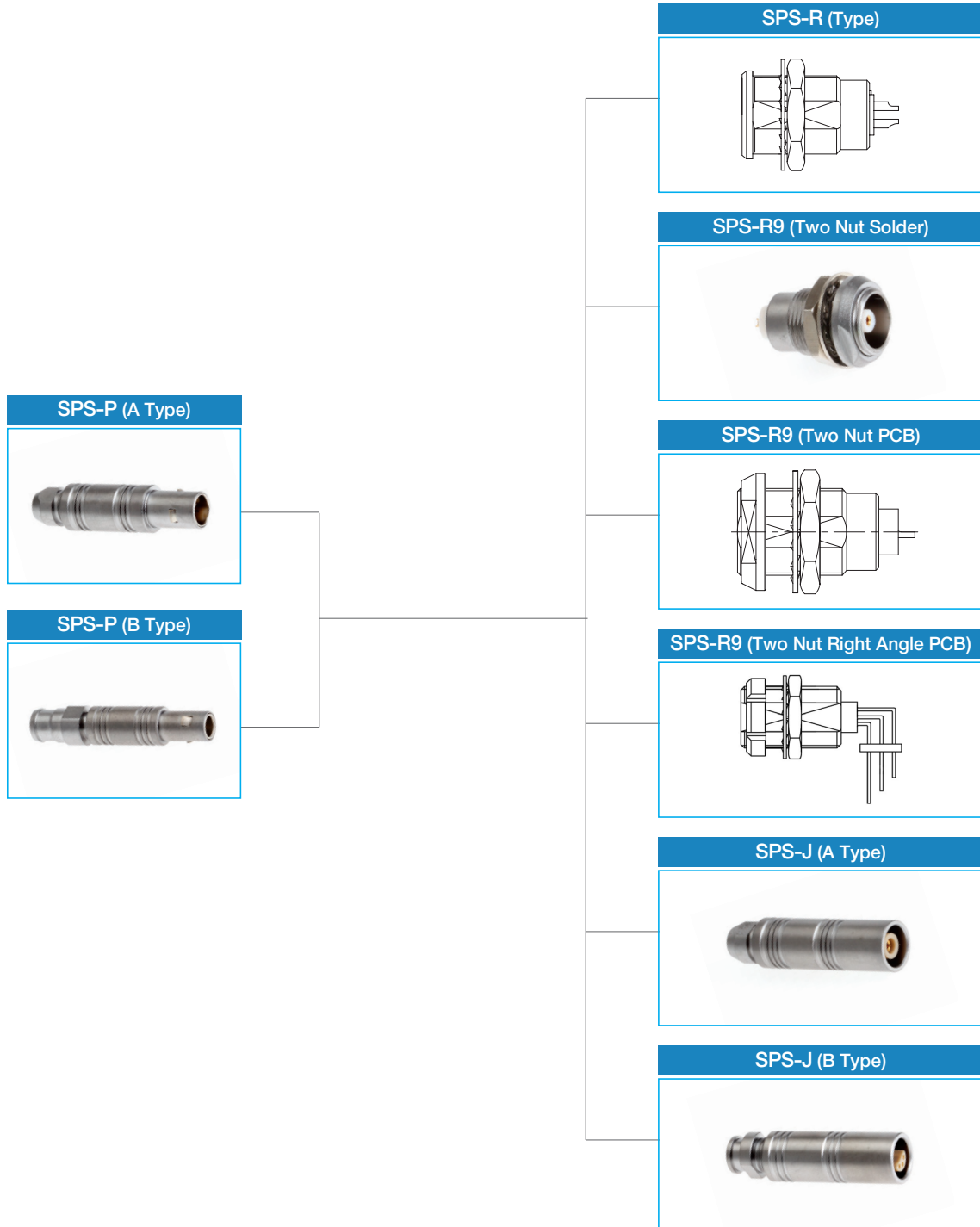
Material and Female Contact Cut Code
See page 66

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

■ Performance

| Performance | Endurance | Humidity | Temperature Range | Vibration Resistance | Shock Resistance | Corrosion Test | Mated IP Rating |
|-------------|---------------|----------------|-------------------|----------------------|------------------|----------------|-----------------|
| Value | >5,000 cycles | 95%rh 140°F | -67°F +482°F | 10~2000Hz, 15g | 100g, 6ms | >144h | IP50 |

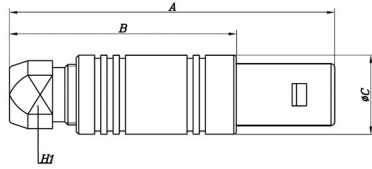
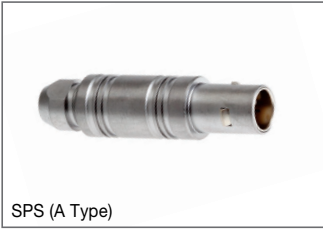
■ Mini-map



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

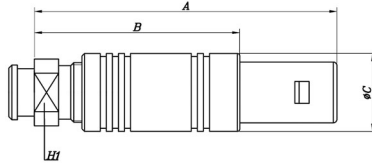
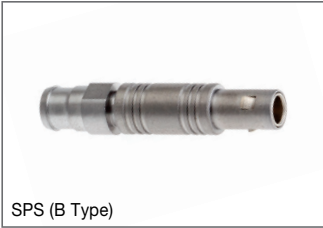
SP Series S Model Plug / Receptacle (Size & shell selection)

SPS Plug



| Product Number | | | | | A | B | φC | H1 |
|----------------|----|---|--|---|------|------|------|------|
| SPS | 00 | P | | A | 26,0 | 18,0 | 6,4 | 4,5 |
| SPS | 0 | P | | A | 34,5 | 24,5 | 9,0 | 6,5 |
| SPS | 1 | P | | A | 42,5 | 31,5 | 12,0 | 8,5 |
| SPS | 2 | P | | A | 52,0 | 40,0 | 14,8 | 11,0 |
| SPS | 3 | P | | A | 61,0 | 46,0 | 17,8 | 14,0 |

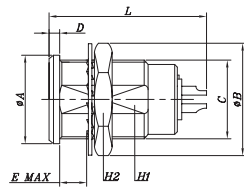
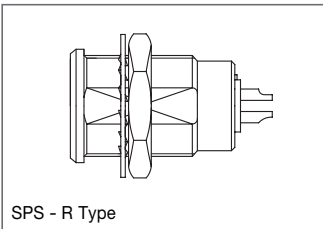
Material : Page 66
 Collet code : Page 66
 P : Male Contact SP : Female and Male Contact
 Contact code : Page 61



| Product Number | | | | | A | B | φC | H1 |
|----------------|----|---|--|---|------|------|------|------|
| SPS | 00 | P | | B | 26,0 | 18,0 | 6,4 | 6,0 |
| SPS | 0 | P | | B | 34,5 | 24,5 | 9,0 | 7,0 |
| SPS | 1 | P | | B | 42,5 | 31,5 | 12,0 | 9,0 |
| SPS | 2 | P | | B | 52,0 | 40,0 | 14,8 | 12,0 |
| SPS | 3 | P | | B | 61,0 | 46,0 | 17,8 | 14,0 |

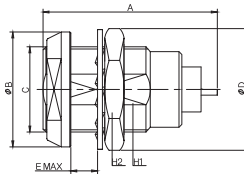
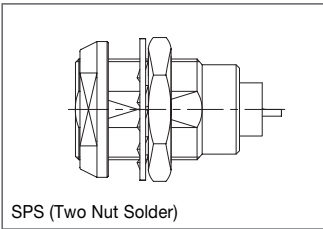
Material : Page 66
 Collet code : Page 66
 P : Male Contact SP : Female and Male Contact
 Contact code : Page 61

SPS Receptacle



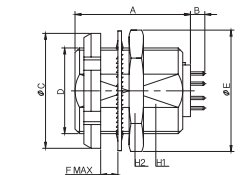
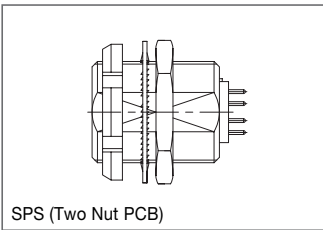
| Product Number | | A | φB | C | D | E | L | L ¹⁾ | H1 | H2 |
|----------------|------|----|------|----------|-----|-----|------|-----------------|------|----|
| SPS | 00 R | 8 | 10,3 | M7×0,5P | 1,0 | 5,5 | - | 15,2 | 6,3 | 9 |
| SPS | 0 R | 10 | 12,5 | M9×0,6P | 1,2 | 5,5 | 17,5 | 18,5 | 8,2 | 11 |
| SPS | 1 R | 14 | 16,0 | M12×1,0P | 1,5 | 5,5 | 20,2 | 21,5 | 10,5 | 14 |
| SPS | 2 R | 18 | 19,5 | M15×1,0P | 1,8 | 5,5 | 24,5 | 26,0 | 13,5 | 17 |
| SPS | 3 R | 22 | 25,2 | M18×1,0P | 2,0 | 5,5 | 29,0 | 30,0 | 16,5 | 22 |

Material : Page 66
 S : Female Contact SP : Female and Male Contact
 Contact code : Page 61
 1) L : Single Contact



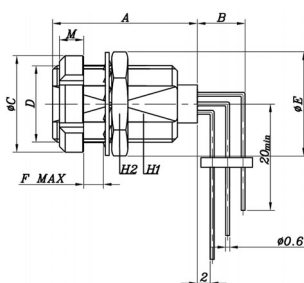
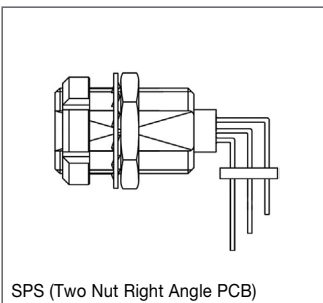
| Product Number | | A | φB | C | φD | E | H1 | H2 |
|----------------|------------------|------|------|----------|------|------|------|------|
| SPS | 0 R _S | 17,5 | 12,0 | M9×0,6P | 12,5 | 8,5 | 8,2 | 11,0 |
| SPS | 1 R _S | 20,2 | 16,0 | M12×1,0P | 16,0 | 10,0 | 10,5 | 14,0 |
| SPS | 2 R _S | 24,5 | 19,5 | M15×1,0P | 20,0 | 11,0 | 13,5 | 17,0 |
| SPS | 3 R _S | 29,0 | 24,0 | M18×1,0P | 25,2 | 14,0 | 16,5 | 22,0 |

Material : Page 66
 S : Female Contact SP : Female and Male Contact
 Contact code : Page 61



| Product Number | | A | B | φC | D | φE | F | H1 | H2 |
|----------------|-------------------|------|-----|------|----------|------|------|------|------|
| SPS | 0 R _{SB} | 15,0 | 3,0 | 12,0 | M9×0,6P | 12,5 | 8,5 | 8,2 | 11,0 |
| SPS | 1 R _{SB} | 17,5 | 3,0 | 16,0 | M12×1,0P | 16,0 | 10,0 | 10,5 | 14,0 |
| SPS | 2 R _{SB} | 20,0 | 3,0 | 20,0 | M15×1,0P | 19,5 | 11,0 | 13,5 | 17,0 |
| SPS | 3 R _{SB} | 24,0 | 3,0 | 24,0 | M18×1,0P | 25,2 | 14,0 | 16,5 | 22,0 |

Material : Page 66
 SB : PCB Female Contact
 SPB : PCB Female and Male Contact
 Contact code : Page 61

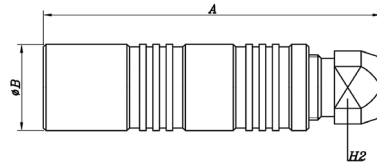
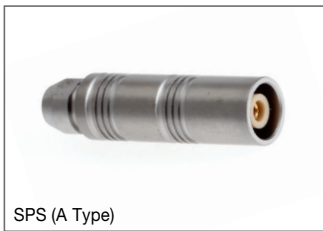


| Product Number | | A | B | φC | D | φE | F | H1 | H2 |
|----------------|--------------------|---|---|----|---|----|---|----|----|
| SPS | 0 R _{LSB} | | | | | | | | |
| SPS | 1 R _{LSB} | | | | | | | | |
| SPS | 2 R _{LSB} | | | | | | | | |
| SPS | 3 R _{LSB} | | | | | | | | |

Material : Page 66
 LSB : Right-angle PCB Female Contact
 LSPB : Right-angle PCB Female and Male Contact
 Contact code : Page 61

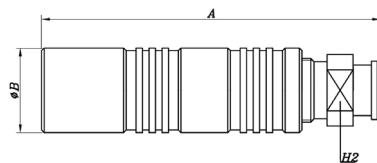
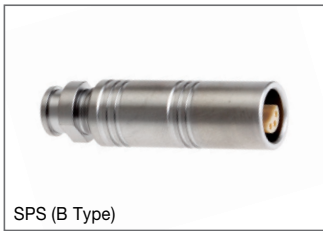
Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

■ SPS Jack



| Product Number | | | | A | ∅ B | H2 |
|----------------|----|---|---|------|------|------|
| SPS | 00 | J | A | 25,0 | 6,5 | 4,5 |
| SPS | 0 | J | A | 33,5 | 8,9 | 6,5 |
| SPS | 1 | J | A | 40,5 | 11,9 | 8,5 |
| SPS | 2 | J | A | 50,0 | 14,8 | 11,0 |
| SPS | 3 | J | A | 59,0 | 17,8 | 14,0 |

Material : Page 66
 Collet code : Page 66
 S : Female Contact SP : Female and Male Contact
 Contact code : Page 61



| Product Number | | | | A | ∅ B | H2 |
|----------------|----|---|---|------|------|------|
| SPS | 00 | J | B | 25,0 | 6,5 | 6,0 |
| SPS | 0 | J | B | 33,5 | 8,9 | 7,0 |
| SPS | 1 | J | B | 40,5 | 11,9 | 9,0 |
| SPS | 2 | J | B | 50,0 | 14,8 | 12,0 |
| SPS | 3 | J | B | 59,0 | 17,8 | 14,0 |

Material : Page 66
 Collet code : Page 66
 S : Female Contact SP : Female and Male Contact
 Contact code : Page 61

■ Contact Code (single contact)

| Series & Model | Size | Contact Code | Current | Contact ∅ | Wire Gauge (Maximum) | Male Contact Arrangement | Female Contact Arrangement |
|----------------|------|--------------|---------|-----------|----------------------|--------------------------|----------------------------|
| SPS | 00 | 113 | 8A | 1,3 | AWG20 | | |
| | 0 | 116 | 12A | 1,6 | AWG18 | | |
| | 1 | 120 | 18A | 2,0 | AWG14-16 | | |
| | | 130 | 25A | 3,0 | AWG10-12 | | |

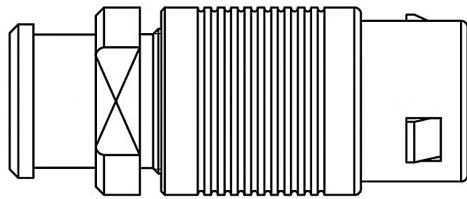
■ Contact Code (coaxial)

| Series & Model | Size | Contact Code | Current | Impedance | Cable Group | VSWR (GHz) | Contact Arrangement |
|----------------|------|--------------|---------|-----------|-------------|------------|---------------------|
| SPS | 00 | 250 | 4A | 50 | 1-3-5-6 | 1,09+11,f | |
| | 0 | 250 | 6A | 50 | 1-2-3-4 | 1,02+25f | |
| | 1 | 250 | 12A | 50 | 1-2-3-4-6 | 1,01+0,8f | |
| | | 275 | 10A | 75 | 5-6-7 | 1,02+0,8f | |

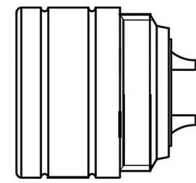
■ Contact Code (multi-contact)

| Series & Model | Size | Contact Code | Current | Contact ∅ | No. of Contacts | Wire Gauge (Maximum) | Contact Arrangement |
|----------------|------|--------------|---------|-----------|-----------------|----------------------|---------------------|
| SPS | 0 | 302 | 10A | 0,9 | 2 | AWG22 | |
| | | 304 | 7A | 0,7 | 4 | AWG24 | |
| | 1 | 302 | 15A | 1,3 | 2 | AWG20 | |
| | | 304 | 10A | 0,9 | 4 | AWG22 | |
| | 2 | 310 | 7A | 0,9 | 10 | AWG22 | |
| | 3 | 302 | 23A | 2,0 | 2 | AWG14 | |
| | | 310 | 9A | 1,3 | 10 | AWG20 | |

Note : Connector contact arrangement is from mating surface.



SPC Series



■ SPC Part Numbering - Hermaphroditic keying system (short dimension)



Size
2

Body Type
P : Plug PF : Fixed plug
R3 : Receptacle J : Jack

Contact Code
306 : 3 Female & 3 Male

Contact Type
SP : Female and Male contact

Screw Cap Code (Plug and Jack only)
A : Screw Cap Terminated
B : Screw Cap + Boot type

Collet Code (Plug and Jack only)
See page 66

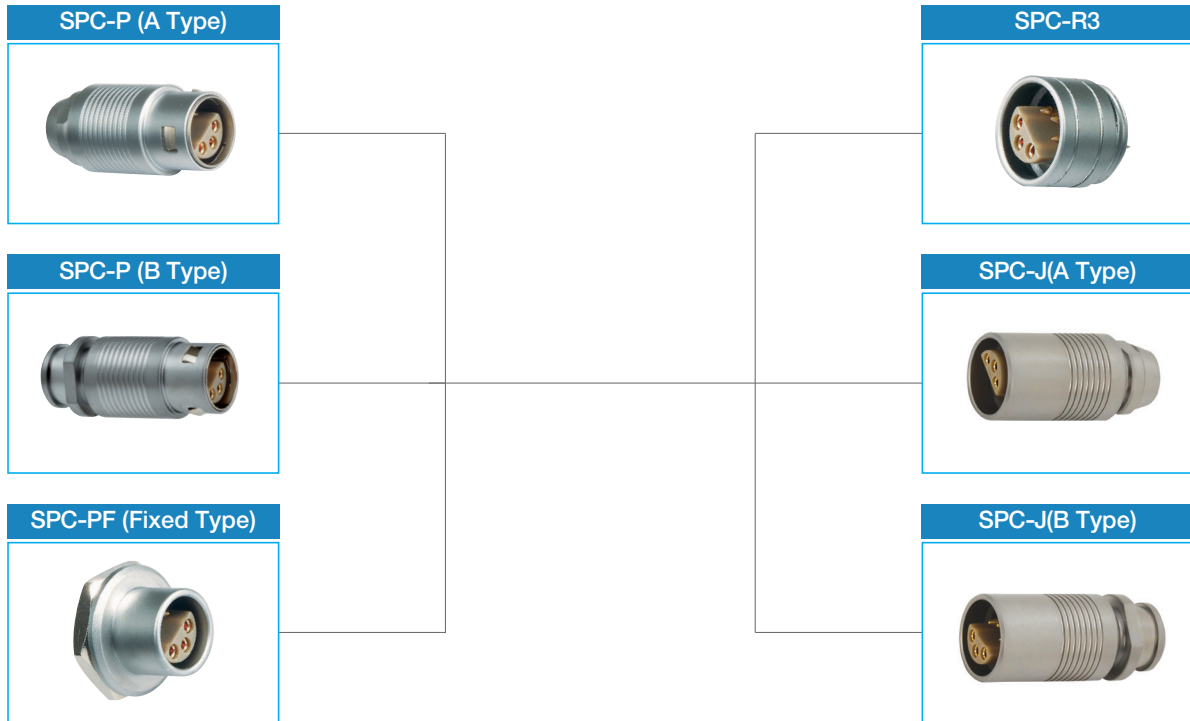
Material and Female Contact Cut Code
See page 66

■ Performance

| Performance | Endurance | Humidity | Temperature Range | Corrosion Test | Mated IP Rating |
|-------------|---------------|-----------------|-------------------|----------------|-----------------|
| Value | >5,000 cycles | 95%rh 140 °F | -67 °F +482 °F | >144h | IP50 |

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

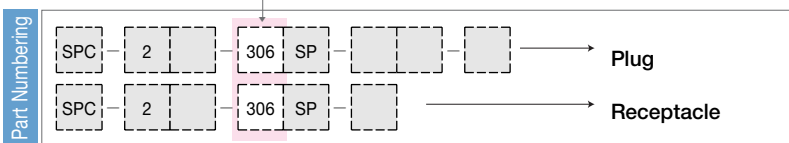
■ Mini-map



■ Contact Code

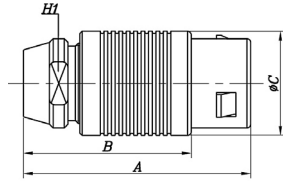
| Series & Model | Size | Contact Code | Current | Contact ϕ | No. of Contacts | Wire Gauge (Maximum) | Contact Arrangement |
|----------------|------|--------------|---------|----------------|-----------------|----------------------|---------------------|
| SPC | 2 | 306 | 12A | 1.3 | 6 | AWG20 | |

Note : Connector contact arrangement is from mating surface.



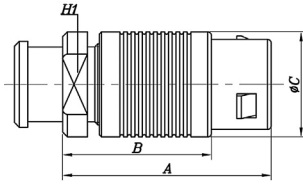
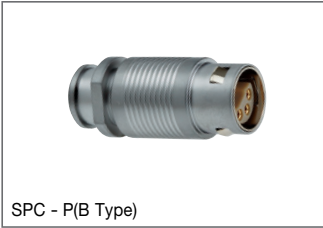
SP Series C Model Plug / Receptacle / Jack(Size & Shell Selection)

■ SPC Plug



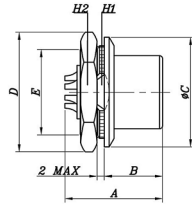
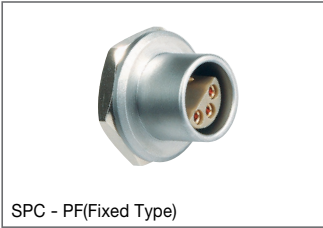
| Product Number | A | B | ø C | H1 |
|--------------------|----|----|-----|------|
| SPC 2 P 306 SP A 1 | 30 | 22 | 14 | 10.5 |

Material : Page 66
Collet code : Page 66



| Product Number | A | B | ø C | H1 |
|--------------------|------|------|-----|----|
| SPC 2 P 306 SP B 1 | 28.4 | 20.4 | 14 | 12 |

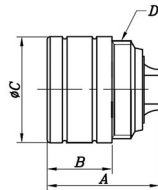
Material : Page 66
Collet code : Page 66



| Product Number | A | B | ø C | D | E | H1 | H2 |
|---------------------|----|-----|-----|------|--------|------|----|
| SPC 2 PF 306 SP B 1 | 17 | 9.5 | 18 | 19.5 | M15×1P | 13.8 | 17 |

Material : Page 66
Collet code : Page 66

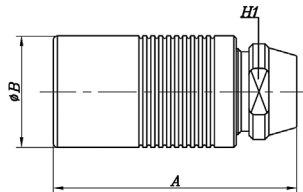
■ SPC Receptacle



| Product Number | A | B | ø C | D |
|-----------------|------|-----|------|-----------|
| SPC 2 R3 306 SP | 14.2 | 8.5 | 14.0 | M13×0.75P |

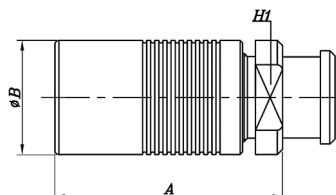
Material : Page 66

■ SPC Jack



| Product Number | A | ø B | H1 |
|--------------------|----|-----|-----|
| SPC 2 J 306 SP A 1 | 28 | 14 | 1.5 |

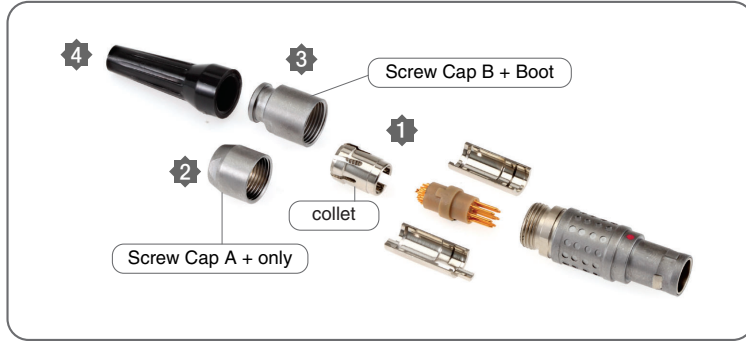
Material : Page 66
Collet code : Page 66



| Product Number | A | ø B | H1 |
|--------------------|------|-----|----|
| SPC 2 J 306 SP B 1 | 26.4 | 14 | 12 |

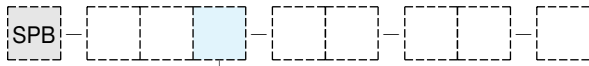
Material : Page 66
Collet code : Page 66

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



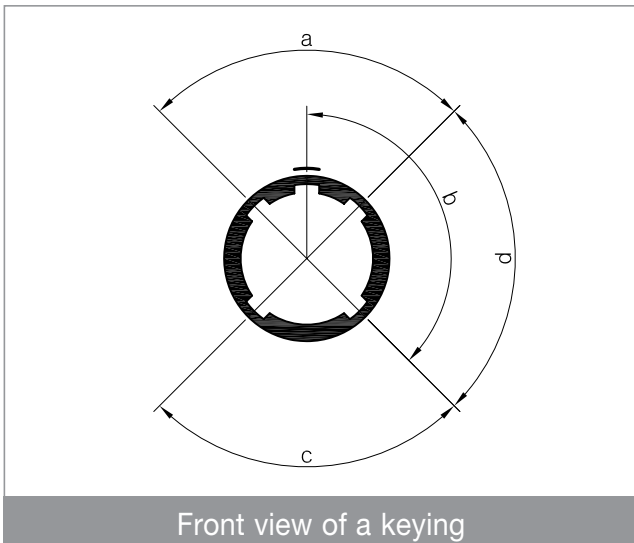
- 1) Collet
 - 2) Screw Cap A
 - 3) Screw Cap B
 - 4) Boot
- Screw Cap B + Boot

■ Key Angles Code - For all SP series



Key Angles

| Angles | a | | | | | | | | | b | | | | c | | | | | d | |
|------------------|-------|-----|-----|-----|-----|-----|-------|-------|--------|------|------|------|------|-----|-----|-----|-----|-----|------|--|
| | 0° | 30° | 40° | 45° | 60° | 90° | 37.5° | 52.5° | 80° | 120° | 135° | 145° | 155° | 45° | 70° | 75° | 80° | 95° | 110° | |
| Part No. | Blank | A | N | D | B | C | E | F | L | K | M | U | X | D1 | H | H1 | L1 | Z | Q | |
| Application size | 00 | o | o | | | o | | | | | | | | o | | | | | | |
| | 0 | o | o | o | | o | o | | | | o | o | o | o | o | o | o | | o | |
| | 1 | o | o | o | | o | o | | O (SP) | | o | o | o | o | o | | o | | | |
| | 2 | o | o | o | o | o | | o | o | | o | | o | | | o | | | o | |
| | 3 | o | o | | o | o | | o | o | | o | | o | | | o | | | o | |






Front view of a keying

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SP Series Collet Code / Material Code

■ Collet Code Information

| Series & Model | Size | Collet Code |  | | | |  | |  | |
|----------------|------|-------------|---|------|---------|-------|---|------------------|---|--|
| | | | Collet | | Cable ø | | Screw Cap Type A | Screw Cap Type B | | |
| | | | ø A | ø B | max | min | | | | |
| SPB | 00 | D22 | 2,2 | — | 2,2 | 1,4 | ● | | | |
| | | D27 | 2,7 | — | 2,7 | > 2,2 | ● | | | |
| | | D30 | 3,1 | 2,8 | 3,0 | 2,5 | ● | | | |
| | 0 | D35 | 3,5 | 2,8 | 3,4 | 2,9 | ● | | | |
| | | D21 | 2,1 | — | 2,0 | 1,5 | ● | ● | | |
| | | D31 | 3,1 | — | 3,0 | 2,1 | ● | ● | | |
| | | B32 | 3,2 | — | 3,2 | > 2,2 | ● | ● | | |
| | | D42 | 4,2 | — | 4,0 | 3,1 | ● | ● | | |
| | | D52 | 5,2 | 4,7 | 5,0 | 4,1 | ● | ● | | |
| | | D56 | 5,6 | 4,7 | 5,5 | 5,1 | ● | ● | | |
| | 1 | M27 | 2,7 | — | 2,7 | > 2,2 | ● | ● | | |
| | | M31 | 3,1 | — | 3,1 | > 2,7 | ● | ● | | |
| | | D42 | 4,2 | — | 4,0 | 3,1 | ● | ● | | |
| | | D52 | 5,2 | — | 5,0 | 4,1 | ● | ● | | |
| | | D62 | 6,2 | — | 6,0 | 5,1 | ● | ● | | |
| | | D72 | 7,2 | 6,7 | 7,0 | 6,1 | ● | ● | | |
| | 2 | D76 | 7,6 | 6,7 | 7,5 | 7,1 | ● | ● | | |
| | | M21 | 2,1 | — | 2,2 | 1,4 | ● | ● | | |
| | | M32 | 3,1 | — | 3,2 | > 2,2 | ● | ● | | |
| | | D42 | 4,2 | — | 4,0 | 3,1 | ● | ● | | |
| | | D52 | 5,2 | — | 5,0 | 4,1 | ● | ● | | |
| | | D62 | 6,2 | — | 6,0 | 5,1 | ● | ● | | |
| | | D72 | 7,2 | — | 7,0 | 6,1 | ● | ● | | |
| | | D82 | 8,2 | — | 8,0 | 7,1 | ● | ● | | |
| D92 | | 9,2 | 8,6 | 9,0 | 8,1 | ● | ● | | | |
| 3 | D99 | 9,9 | 8,6 | 9,7 | 9,1 | ● | ● | | | |
| | M52 | 5,2 | — | 5,0 | 4,1 | ● | ● | | | |
| | D62 | 6,2 | — | 6,0 | 5,1 | ● | ● | | | |
| | D72 | 7,2 | — | 7,0 | 6,1 | ● | ● | | | |
| | D82 | 8,2 | — | 8,0 | 7,1 | ● | ● | | | |
| | D92 | 9,2 | — | 9,0 | 8,1 | ● | ● | | | |
| | D10 | 10,2 | — | 10,0 | 9,1 | ● | ● | | | |
| | D11 | 11,2 | 10,2 | 11,0 | 10,1 | ● | ● | | | |
| SPS | 00 | L29 | 2,9 | — | 2,8 | 2,4 | ● | ● | | |
| | | L31 | 3,1 | — | 3,0 | 2,6 | ● | ● | | |
| | 0 | L42 | 4,2 | — | 4,1 | 3,7 | ● | ● | | |
| L44 | | 4,4 | — | 4,3 | 3,5 | ● | ● | | | |
| SPC | 2 | L62 | 6,2 | — | 6,1 | 5,3 | ● | ● | | |
| | | L37 | 3,7 | — | 3,6 | 3,2 | ● | ● | | |
| | | L42 | 4,0 | — | 4,1 | 3,7 | ● | ● | | |
| | | L52 | 5,2 | — | 5,1 | 4,7 | ● | ● | | |
| | | L62 | 6,2 | — | 6,1 | 5,7 | ● | ● | | |
| | | L72 | 7,2 | — | 7,1 | 6,7 | ● | ● | | |
| | | L82 | 8,2 | — | 8,1 | 7,7 | ● | ● | | |

Collet Code

■ Material Code (For all SP Metal series)

| Contact | | Insulator | | Female Contact Cut | | Latch Sleeve | |
|---------|----------------|-----------|----------|--------------------|--------|--------------|----------|
| code 1 | Material | code 2 | Material | code 3 | Method | code 4 | Material |
| A | Brass | L | PEEK | S | Side | R | Brass |
| P | Bronze | N | PA | H | Half | P | Bronze |
| R | Bronze (press) | T | Teflon | | | | |

Part Numbering

Material Code

Material Code Instruction

Plug + Male Contact : Code 1, 2, 4

Plug + Female Contact : Code 1, 2, 3, 4

Plug + Male & Female Contact : Code 1, 2, 3, 4


Receptacle/Jack + Female Contact : Code 1, 2, 3

Receptacle/Jack + Male Contact : Code 1, 2

Receptacle/Jack + Male & Female Contact : Code 1, 2, 3



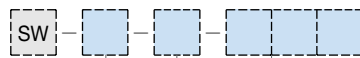
Features

- Push-pull self latching technology
- Ultra precision
- High contact density
- High reliability / durability
- High vibration and outer force resistance
- UL Recognized 
- Standard and Custom Design

Applications

- Telecommunications
- Professional A/V
- HDTV panel system
- Vision related equipment
- and much more
- Optical testing equipment
- Portable wireless radio
- CCTV
- Medical equipment

■ Part Numbering



Drawing Number
Optional Suffix (Omissible)
 1,2,3
 To indicate modification of original
Cable Length : 3 Digits
 Unit Plug : m
 Recep : cm
 Ex) Using 3m Cable for Plug : 003
 Using 30cm Cable for Recep : 030

■ Plug Cable Assembly



| Type | Construction |
|------|-------------------------------------|
| A | SP Connector + Cable + Housing |
| B | SP Connector + Cable + SP Connector |

※ Design and Customization Service Available

■ Receptacle Cable Assembly



| Type | Construction |
|------|---|
| A | SP Connector + wire + open end |
| B | SP Connector + wire + Housing |
| C | SP Connector + wire + Housing with core |

※ Design and Customization Service Available

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SPP Series P Model Part Numbering



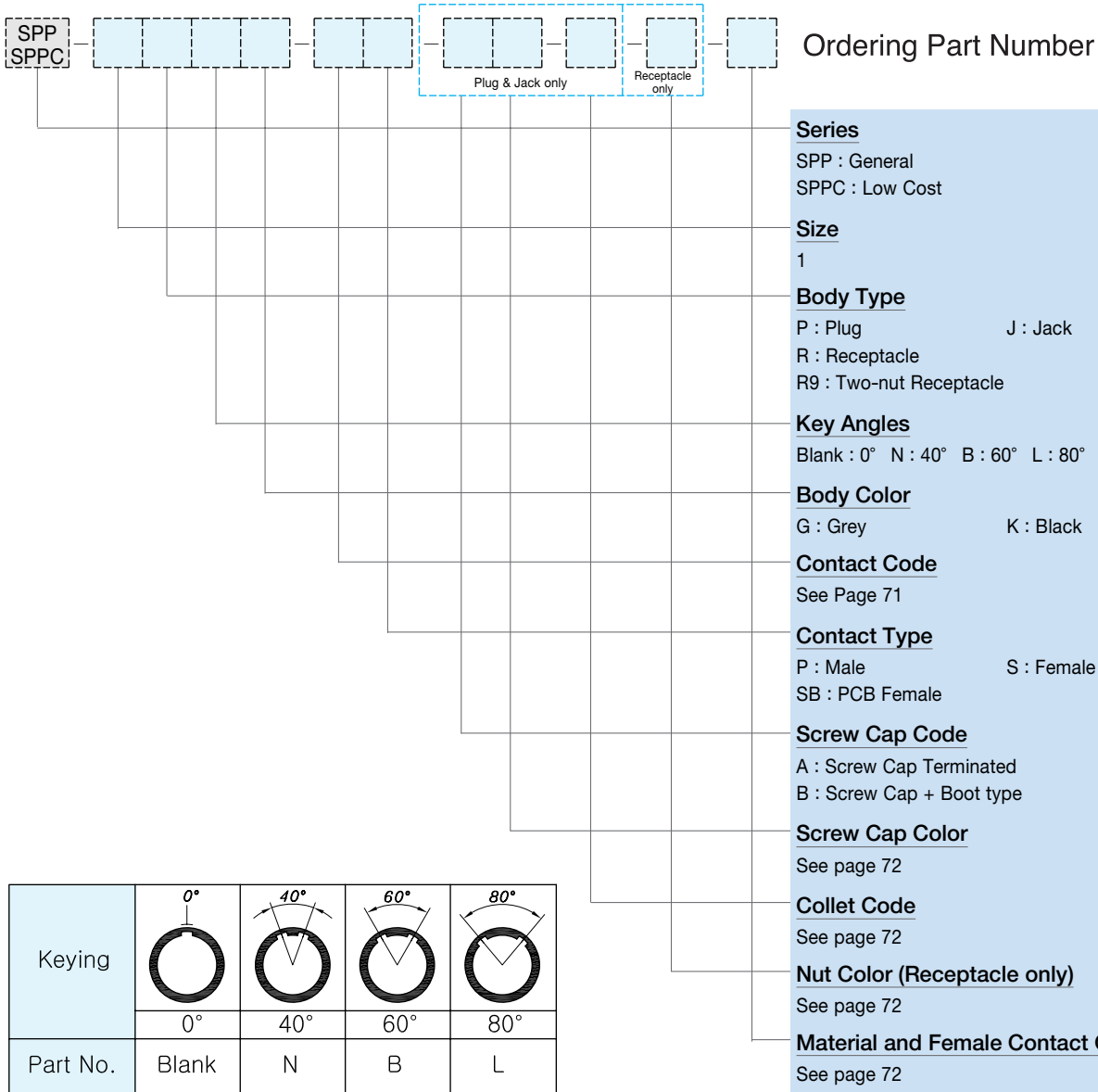
Features

- User friendly and robust
- Secure multi-contact push-pull mechanism that allows quick connection and disconnection while providing reliable strain relief
- Overmolded with silicone or urethane,
- Available in cable collet or flexible boot
- Withstands extensive steam or chemical sterilization with rugged PSU or PEI housing materials
- Precise connection with color codes and multiple-key configurations
- Lightweight and durable for more than 1,000 mating cycles
- UL Recognized
- Protection rating of IP 50
- Autoclave(SPP)

Applications

- Medical electronics
- Test and measurement
- Industrial electronics
- Automotive

■ SPP Part Numbering - Plastic



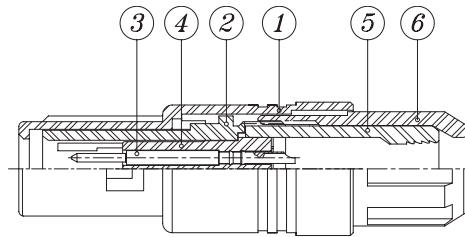
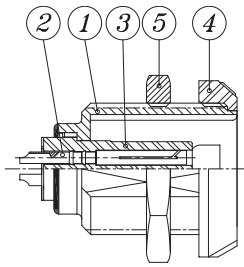
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Performance

| Characteristics | Value | Standards |
|--|---------------|----------------------|
| Average retention force when pulling on the cable 1N=0,102kg | 90N | IEC 60512-8 test 15f |
| Cable retention force (depends on cable construction) 1N=0,102kg | 50 - 150N | IEC 60512-9 test 17c |
| Endurance (Shell) | > 1000 cycles | IEC 60512-5 test 9a |
| Working temperature range (PSU shell, Color : Black, Grey) | -50 / + 150℃ | - |
| Working temperature range (PEI shell, Color : Black, Grey) | -50 / + 170℃ | - |
| Working temperature range (PC shell, Color : Black, Grey) | -25 / + 85℃ | - |

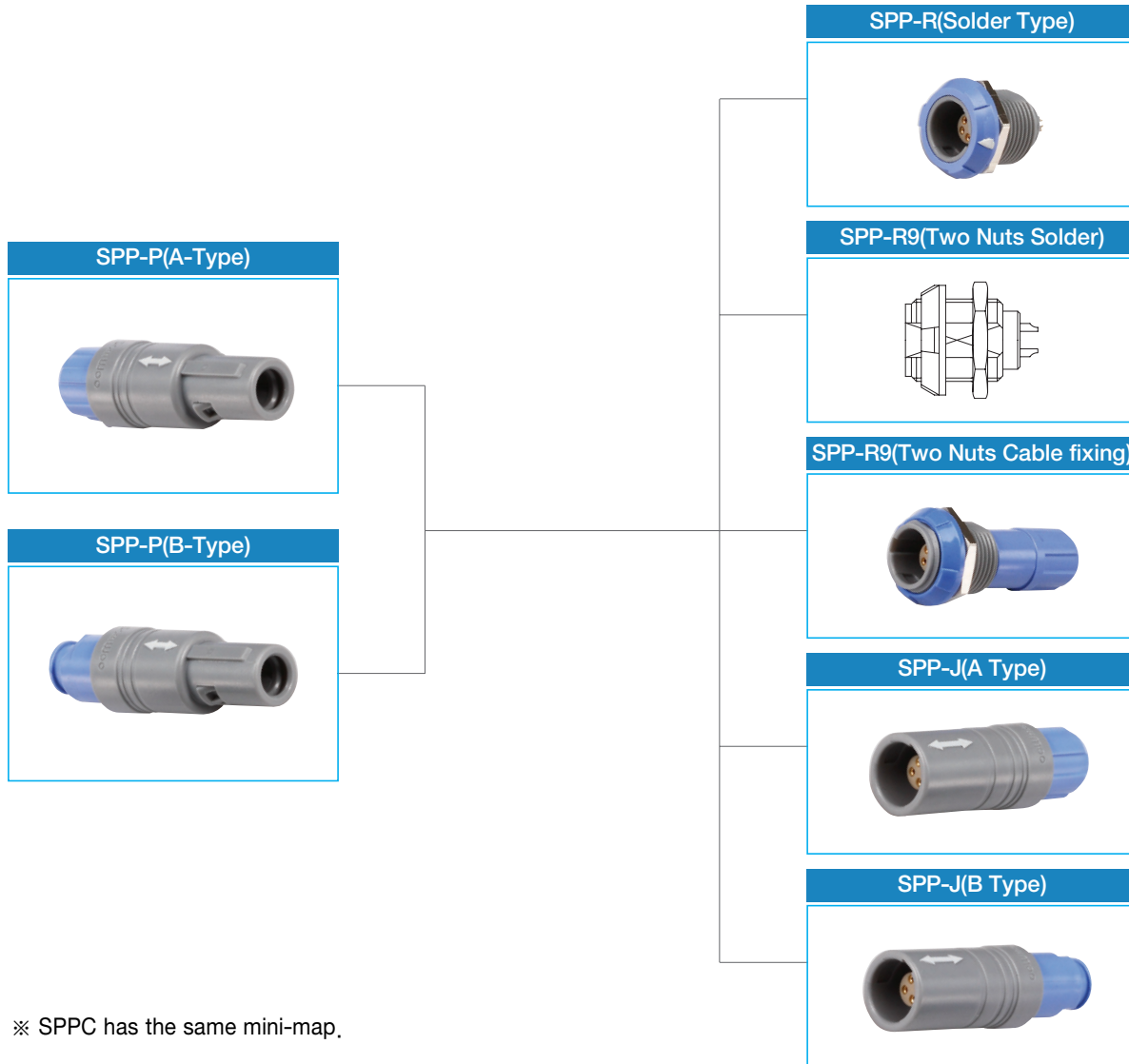
■ Standard Model

- Fixed Receptacle
- ① Body
 - ② Female contact
 - ③ Insulator
 - ④ Front nut
 - ⑤ Nut



- Straight Plug
- ① Body
 - ② Latch sleeve
 - ③ Male contact
 - ④ Insulator
 - ⑤ Collet
 - ⑥ Screw cap

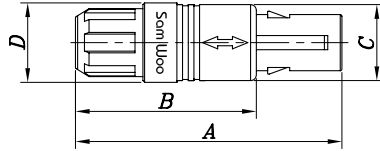
■ Mini-map



※ SPPC has the same mini-map.

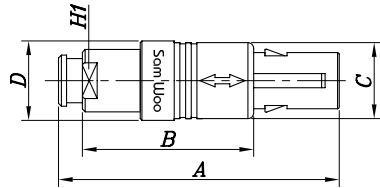
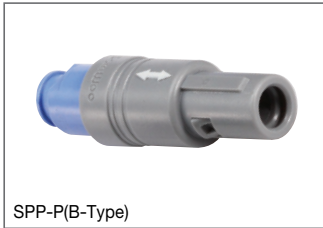
SPP Series P Model Plug / Receptacle(Size & shell selection)

■ SPP Plug



| Product Number | A | B | ∅ C | ∅ D |
|--|------|------|------|------|
| [SPP] [SPPC] [1] [P] [] [] [P] [A] [] [] [] [] | 45,0 | 30,0 | 13,4 | 14,0 |

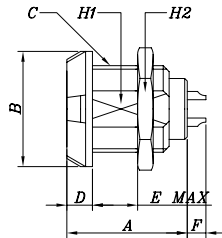
Material & Female contact Cut code : Page 72
 Collet Code : Page 72
 Screw Cap Color : Page 72
 Contact Code : Page 71
 Body Color : G(Grey) or K(Black)
 Key angles : Page 68



| Product Number | A | B | ∅ C | ∅ D | H1 |
|--|------|------|------|------|-----|
| [SPP] [SPPC] [1] [P] [] [] [P] [B] [] [] [] [] | 35,0 | 28,7 | 13,4 | 14,0 | 9,0 |

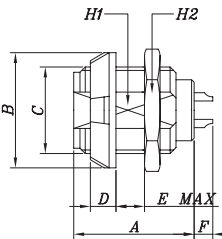
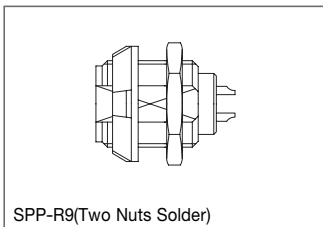
Material & Female contact Cut code : Page 72
 Collet Code : Page 72
 Screw Cap Color : Page 72
 Contact Code : Page 71
 Body Color : G(Grey) or K(Black)
 Key angles : Page 68

■ SPP Receptacle



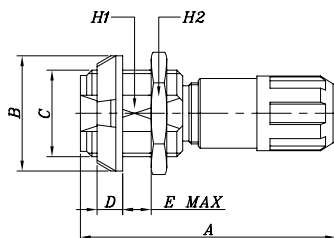
| Product Number | A | B | C | D | E | F | H1 | H2 |
|--|------|------|----------|-----|-----|-----|------|------|
| [SPP] [SPPC] [] [] [R] [] [] [S] [] [] [] [] | 20,5 | 18,5 | M14×1,0P | 4,0 | 9,0 | 2,5 | 12,5 | 17,0 |

Material & Female contact Cut code : Page 72
 Nut Color : Page 72
 Contact code : Page 71
 Body Color : G(Grey) or K(Black)
 Key angles : Page 68



| Product Number | A | B | C | D | E | F | H1 | H2 |
|--|------|------|----------|---|---|-----|------|----|
| [SPP] [SPPC] [] [] [] [] [] [S] [] [] [] [] | 20,5 | 18,5 | M14×1,0P | 4 | 9 | 2,5 | 12,5 | 17 |

Material & Female contact Cut code : Page 72
 Nut Color : Page 72
 Contact code : Page 71
 Body Color : G(Grey) or K(Black)
 Key angles : Page 68

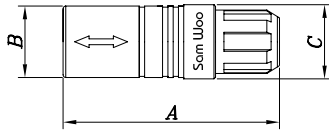
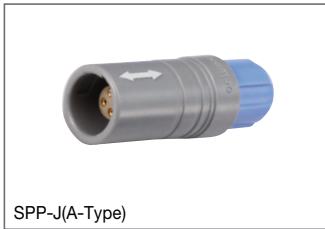


| Product Number | A | B | C | D | E | H1 | H2 |
|---|------|------|----------|-----|-----|------|------|
| [SPP] [SPPC] [1] [R9] [] [] [S] [A] [] [] [] [] | 40,0 | 18,5 | M14×1,0P | 4,0 | 9,0 | 12,5 | 17,0 |

Material & Female contact Cut code : Page 72
 Collet Code : Page 72
 Screw Cap Color : Page 72
 Contact Code : Page 71
 Body Color : G(Grey) or K(Black)
 Key angles : Page 68

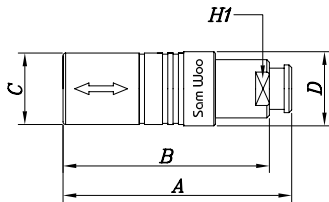
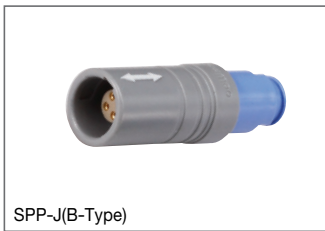
Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

■ SPP Jack



| Product Number | A | ∅ B | ∅ C |
|-------------------------------|------|------|------|
| SPP- SPPC- T J I S A | 40,0 | 13,5 | 14,0 |

Material & Female contact Cut code : Page 72
 Collet Code : Page 72
 Screw Cap Color : Page 72
 Contact Code : Page 71
 Body Color : G(Grey) or K(Black)
 Key angles : Page 68



| Product Number | A | B | ∅ C | ∅ D | H1 |
|-------------------------------|------|------|------|------|-----|
| SPP- SPPC- T J I S B | 43,0 | 38,7 | 13,5 | 14,0 | 9,0 |

Material & Female contact Cut code : Page 72
 Collet Code : Page 72
 Screw Cap Color : Page 72
 Contact Code : Page 71
 Body Color : G(Grey) or K(Black)
 Key angles : Page 68

■ Contact Code

| Series & Model | Size | Contact Code | Current | | Contact ∅ | No. of Contacts | Wire Gauge (Maximum) | Contact Arrangement |
|----------------|------|--------------|---------|------|-----------|-----------------|----------------------|---------------------|
| | | | SPP | SPPC | | | | |
| SPP & SPPC | 1 | 302 | 10A | 5A | 1,3 | 2 | AWG20 | |
| | | 304 | 8A | 3A | 0,9 | 4 | AWG22 | |
| | | 305 | 7A | 3A | 0,9 | 5 | AWG22 | |
| | | 306 | 6A | 2A | 0,7 | 6 | AWG26 | |
| | | 307 | 5A | 2A | 0,7 | 7 | AWG26 | |
| | | 308 | 5A | 2A | 0,7 | 8 | AWG26 | |
| | | 310 | 3A | 1A | 0,5 | 10 | AWG28 | |

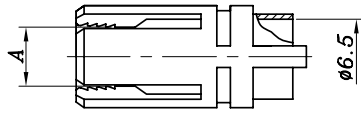
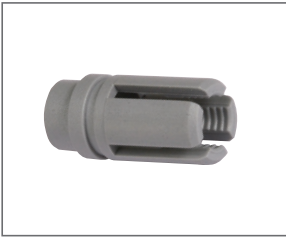
Note : Connector contact arrangement is from solder pot.

SPP Series P Model Contact Code

■ Screw cap color / Nut color

| Code | BK | GY | WH | RD | GN | BU | OR | YE | BR |
|-------|-------|------|-------|-----|-------|------|--------|--------|-------|
| Color | Black | Grey | White | Red | Green | Blue | Orange | Yellow | Brown |

■ Collet Code



| Series & Model | Size | Collet Code | A | Cable Ø | |
|----------------|------|-------------|-----|---------|-----|
| | | | | Max | Min |
| SPP SPPC | 1 | D39 | 3,9 | 3,9 | 2,7 |
| | | D52 | 5,2 | 5,2 | 4 |
| | | D65 | 6,5 | 6,5 | 5,3 |

■ Material Code (For all SP Plastic series)

| Contact | | Insulator | | Female Contact Cut | | Latch Sleeve / Receptacle Body | |
|---------|----------|-----------|----------|--------------------|----------|--------------------------------|----------|
| Code 1 | Material | Code 2 | Material | Code 3 | Material | Code 4 | Material |
| A | Brass | N | PA | H | Half | C | PC |
| P | Bronze | L | PEEK | S | Side | J | PEI |
| R | Bronze | | | | | U | PSU |

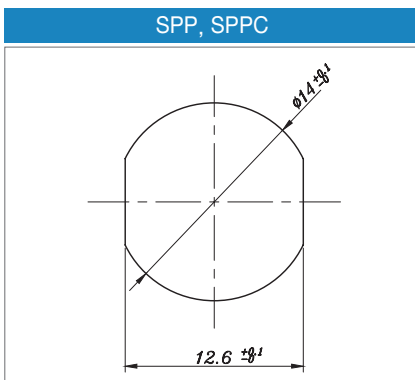
Material Code Instruction

Plug + Male Contact : Code 1, 2, 4

Receptacle + Female Contact : Code 1, 2, 3, 4

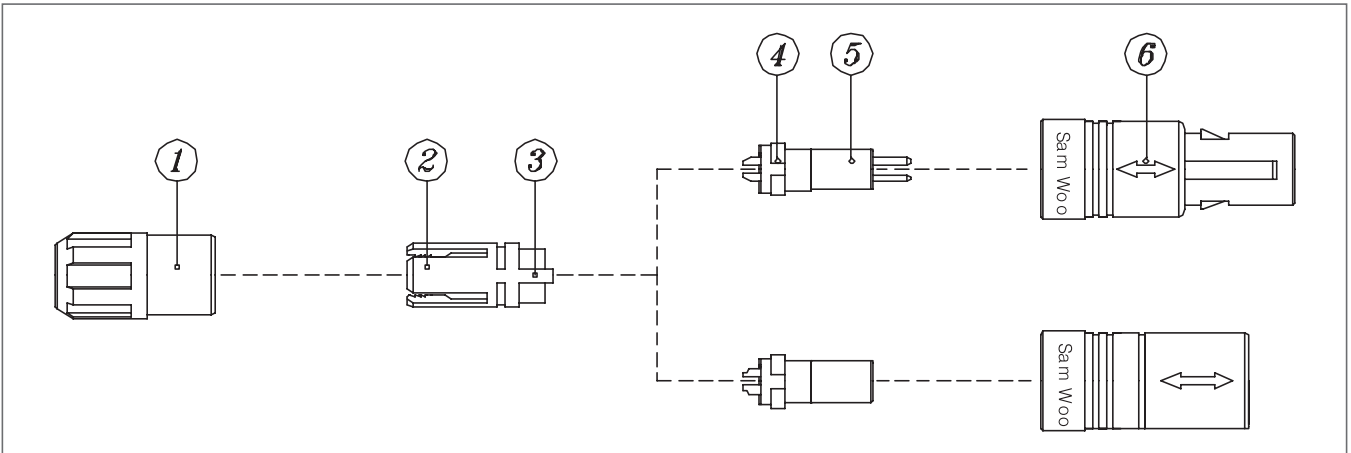
Jack + Female Contact : Code 1, 2, 3, 4

■ SPP, SPPC Series Panel Layout

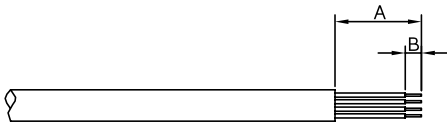


Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

■ Solder contacts



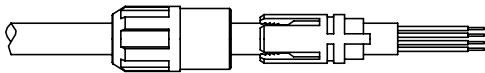
1.



1. Strip the cable according to the lengths given in the table.
Tin the conductors.

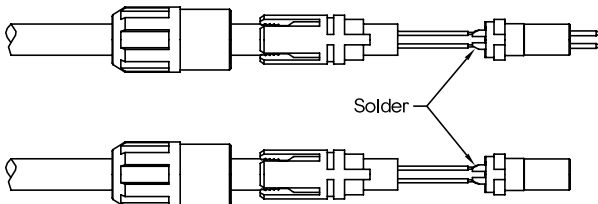
| Configuration | Dimensions(mm) | |
|---------------|----------------|-----|
| | A | B |
| 302 | 14,0 | 4,0 |
| 304, 305 | 13,0 | 3,0 |
| 306 to 314 | 12,5 | 2,5 |

2.



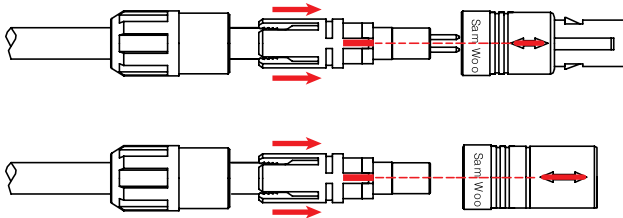
2. Slide the screw cap ① and then the collet ② onto the cable.

3.



3. Solder conductors into contacts, making sure that neither solder nor flux gets onto the insulator or cable insulation.

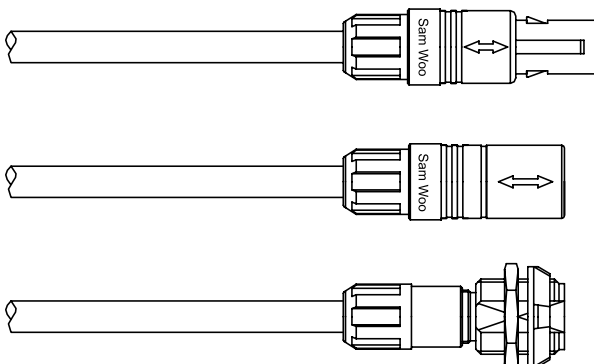
4.



4. Slide the collet ② forward and locate tag ③ in the slot ④ on the insulator ⑤. Slide screw cap ① over collet ② and then push the whole assembly into p)body ⑥ whilst turning it to ensure that the tag ③ locates in the inside slot of the p) body. Tighten the screw cap ① to the maximum torque of 0,25 Nm.

◆ Receptacle mounting nut torque = 1,5 Nm.

5.

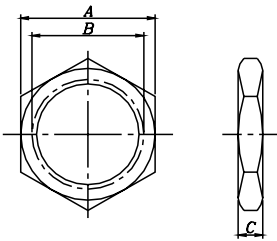


5. Completion

■ Applied Nut per Receptacle type

| Receptacle Type | Applied Nut |
|--|--------------------------------|
| R : Receptacle | Hexagonal Nut |
| BR : Bulkhead Receptacle | Hexagonal Nut or Optional Nut |
| R9 : Two-Nut Receptacle | Hexagonal Nut and Optional Nut |
| RT : Receptacle-threaded type | Hexagonal Nut or Optional Nut |
| RT1 : Right-angle Receptacle-threaded type | Hexagonal Nut or Optional Nut |
| RT2 : Right-angle Receptacle-threaded type + H cut | Hexagonal Nut or Optional Nut |

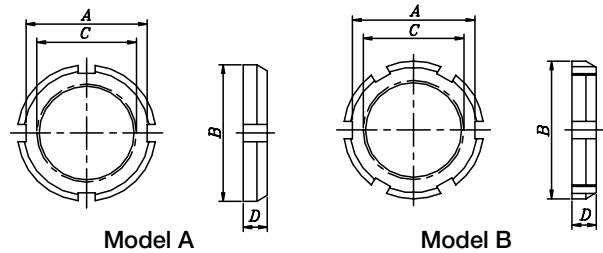
■ Hexagonal Nut



| Product Number | Series | Dimensions (mm) | | |
|----------------|--------|-----------------|----------|-----|
| | | A | B | C |
| SPHN-00R-M7 | 00 | 9 | M7×0,5 | 2,0 |
| SPHN-0R-M9 | 0 | 11 | M9×0,6 | 2,0 |
| SPHN-0R-M10 | 0 | 12 | M10×0,75 | 2,5 |
| SPHN-0R-M14 | 0 | 17 | M14×1,0 | 2,5 |
| SPHN-1R-M14 | 1 | | | |
| SPHN-1R-M12 | 1 | 14 | M12×1,0 | 2,5 |
| SPHN-1R-M12 | 1 | | | |
| SPHN-1R-M16 | 1 | 19 | M16×1,0 | 3,0 |
| SPHN-2R-M16 | 2 | | | |
| SPHN-2R-M15 | 2 | 17 | M15×1,0 | 2,7 |
| SPHN-2R-M20 | 2 | 24 | M20×1,0 | 4,0 |
| SPHN-3R-M18 | 3 | 22 | M18×1,0 | 3,0 |
| SPHN-3R-M24 | 3 | 30 | M24×1,0 | 5,0 |

■ 1. Notched Nuts

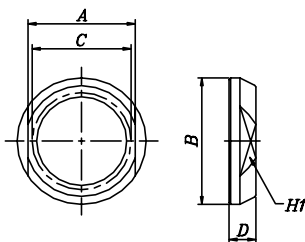
► Optional Nut



| Product Number | Model | Dimensions (mm) | | | |
|----------------|-------|-----------------|------|---------|-----|
| | | A | B | C | D |
| SPNN-00R-M7 | A | 8,7 | 10,0 | M7×0,5 | 2,5 |
| SPNN-0R-M9 | A | 10,5 | 12,0 | M9×0,6 | 2,5 |
| SPNN-0R-M14 | A | 15,8 | 18,0 | M14×1,0 | 3,5 |
| SPNN-1R-M12 | A | 14,0 | 16,0 | M12×1,0 | 3,5 |
| SPNN-1R-M16 | B | 17,5 | 20,0 | M16×1,0 | 3,5 |
| SPNN-1R-M11 | A | 12,1 | 14,0 | M11×0,5 | 3,5 |
| SPNN-2R-M15 | B | 17,5 | 20,0 | M15×1,0 | 3,5 |
| SPNN-2R-M19 | B | 20,5 | 24,0 | M19×1,0 | 3,5 |
| SPNN-2R-M20 | B | 22,5 | 25,0 | M20×1,0 | 3,5 |

■ 2. Conical Nuts

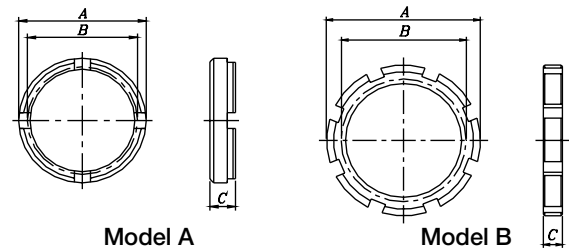
► Optional Nut



| Product Number | Dimensions (mm) | | | | |
|----------------|-----------------|------|---------|-----|----|
| | A | B | C | D | H1 |
| SPCN-00R-M7 | 8,0 | 10,0 | M7×0,5 | 2,5 | 8 |
| SPCN-0R-M9 | 10,0 | 12,0 | M9×0,6 | 2,5 | 10 |
| SPCN-0R-M14 | 16,0 | 18,0 | M14×1,0 | 3,0 | 16 |
| SPCN-1R-M12 | 13,0 | 16,0 | M12×1,0 | 3,2 | 13 |
| SPCN-1R-M16 | 17,0 | 20,0 | M16×1,0 | 4,0 | 17 |
| SPCN-1R-M11 | 12,0 | 14,0 | M11×0,5 | 3,2 | 12 |
| SPCN-2R-M15 | 17,0 | 20,0 | M15×1,0 | 3,8 | 17 |
| SPCN-2R-M19 | 20,0 | 24,0 | M19×1,0 | 5,8 | 20 |
| SPCN-2R-M20 | 22,0 | 25,0 | M20×1,0 | 5,0 | 20 |
| SPCN-3R-M18 | 20,0 | 24,0 | M18×1,0 | 4,5 | 20 |
| SPCN-3R-M24 | 27,0 | 30,0 | M24×1,0 | 4,5 | 24 |

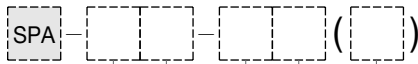
■ 3. Round Nuts

► Optional Nut



| Product Number | Model | Dimensions (mm) | | |
|----------------|-------|-----------------|----------|-----|
| | | A | B | C |
| SPRN-00R-M7 | A | 9,0 | M7×0,5 | 4,0 |
| SPRN-0R-M9 | A | 11,0 | M9×0,6 | 4,0 |
| SPRN-0R-M14 | A | 18,0 | M14×1,0 | 5,0 |
| SPRN-1R-M12 | A | 14,0 | M12×1,0 | 5,0 |
| SPRN-1R-M16 | A | 20,0 | M16×1,0 | 5,0 |
| SPRN-2R-M15 | A | 18,0 | M15×1,0 | 5,5 |
| SPRN-2R-M15 | A | 17,5 | M15×0,75 | 2,5 |
| SPRN-3R-M18 | A | 22,0 | M18×1,0 | 5,5 |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



Size
0, 1, 2, 3

Accessory Type
B : Boot

Color Code
BK : Black
GY : Grey
WH : White
RD : Red
GN : Green
BU : Blue
OR : Orange
YE : Yellow
BR : Brown

Boot Size Code
Insert ϕA from below chart "Min Cable ϕ "

Material
Blank : Polyurethane
S : Silicon

■ Boot Size Code (example with color black)



| Boot Product Number | Size | Dimension | | Cable ϕ | | Color |
|---------------------|------|-----------|----|--------------|------|-------|
| | | ϕA | L | max | min | |
| SPA-0B-BK25 | 0 | 2,5 | 24 | 2,9 | 2,5 | |
| SPA-0B-BK30 | | 3,0 | 24 | 3,4 | 3,0 | |
| SPA-0B-BK35 | | 3,5 | 24 | 3,9 | 3,5 | |
| SPA-0B-BK40 | | 4,0 | 24 | 4,4 | 4,0 | |
| SPA-0B-BK45 | | 4,5 | 24 | 5,2 | 4,5 | |
| SPA-1B-BK25 | 1 | 2,5 | 30 | 2,9 | 2,5 | |
| SPA-1B-BK30 | | 3,0 | 30 | 3,4 | 3,0 | |
| SPA-1B-BK35 | | 3,5 | 30 | 3,9 | 3,5 | |
| SPA-1B-BK40 | | 4,0 | 30 | 4,4 | 4,0 | |
| SPA-1B-BK45 | | 4,5 | 30 | 4,9 | 4,5 | |
| SPA-1B-BK54 | | 5,4 | 30 | 6,0 | 5,4 | |
| SPA-1B-BK65 | 2 | 6,5 | 30 | 7,0 | 6,5 | |
| SPA-2B-BK40 | | 4,0 | 36 | 4,5 | 4,0 | |
| SPA-2B-BK45 | | 4,5 | 36 | 5,0 | 4,5 | |
| SPA-2B-BK50 | | 5,0 | 36 | 5,5 | 5,0 | |
| SPA-2B-BK60 | | 6,0 | 36 | 6,5 | 6,0 | |
| SPA-2B-BK70 | | 7,0 | 36 | 7,7 | 7,0 | |
| SPA-2B-BK78 | | 7,8 | 36 | 8,8 | 7,8 | |
| SPA-3B-BK70 | 3 | 7,0 | 42 | 7,9 | 7,0 | |
| SPA-3B-BK80 | | 8,0 | 42 | 8,9 | 8,0 | |
| SPA-3B-BK90 | | 9,0 | 42 | 10,0 | 9,0 | |
| SPA-3B-BK110 | | 11,0 | 42 | 11,0 | 10,5 | |

! To change color from above example, change "BK" to color of preference.

■ Material

| Material | Temperature range |
|--------------|-------------------|
| Silicon | -60°C ~ +200°C |
| Polyurethane | -40°C ~ +80°C |

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.



Features

- User friendly and robust
- Secure multi-contact push-pull mechanism that allows quick connection and disconnection while providing reliable strain relief
- Overmolded with silicone or urethane,
- Available in cable collet or flexible boot
- Withstands extensive steam or chemical sterilization with rugged PSU or PEI housing materials
- Precise connection with color codes and multiple-key configurations
- Lightweight and durable for more than 1,000 mating cycles
- UL Recognized
- Protection rating of IP 50
- Autoclave(SPP)
- Standard and Custom Design

Applications

- Medical electronics
- Industrial electronics
- Test and measurement
- Automotive

Part Numbering



Drawing Number
Optional Suffix (Omissible)
 1,2,3
 To indicate modification of original
Cable Length : 3 Digits
 Unit Plug : m
 Recep : cm
 Ex) Using 3m Cable for Plug : 003
 Using 30cm Cable for Recep : 030

Plug Cable Assembly



| Type | Construction |
|------|---------------------------------------|
| A | SPP Connector + Cable + Housing |
| B | SPP Connector + Cable + SPP Connector |

※ Design and Customization Service Available

Receptacle Cable Assembly



| Type | Construction |
|------|--|
| A | SPP Connector + wire + open end |
| B | SPP Connector + wire + Housing |
| C | SPP Connector + wire + Housing with core |

※ Design and Customization Service Available

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.





Features

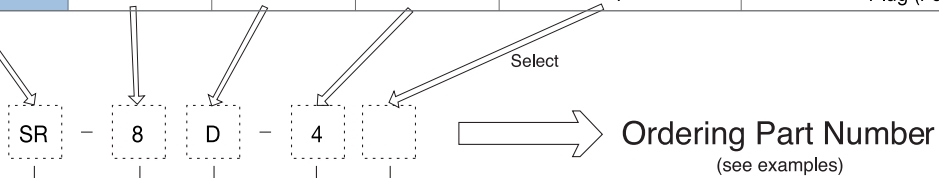
- Protection rating of IP67 with over molding
- M12 threaded locking

Applications

- Factory Automation and Sensors
- Process control
- Industrial instrumentation
- Commercial electronics

Part Numbering

| Series | Size | Mating Part Type | No. of Contacts | Suffix (Contact Type) | Notes |
|--------|------|------------------|-----------------|-----------------------|-----------------------|
| SR | 8 | D | 4 | J | Jack (Male contact) |
| | | | | P | Plug (Female contact) |



Connector Series

SR Series

Size

8

Mating Part Type

D : DC Type

No. of Contacts

4

Body Type

J : Jack

P : Plug

Examples

SR - 8D - 4J

SR series - Size 8 Jack - 4 Male Contact

SR - 8D - 4P



SR series - Size 8 Plug - 4 Female Contact

Material Used / Finish

| | Material | Finish |
|--------------|----------|---|
| Cap | Brass | Ni Plating |
| Insulator | PBT | Black |
| Outer sheath | PVC | - |
| Contacts | Male | Brass Gold or Silver Plating |
| | Female | Phosphor bronze Gold or Silver Plating |

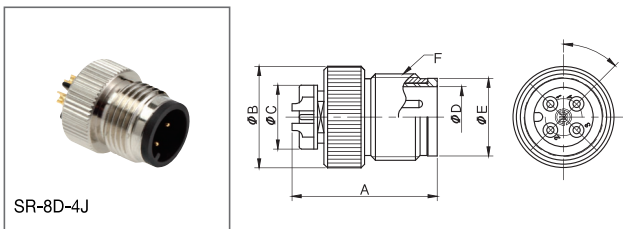
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

Major Performances / Contact Arrangements

| Size/No of Contacts | Size 8 | |
|---------------------------------|--|---|
| Performance | 4 | |
| Withstanding Voltage (per min) | AC 1500V | |
| Rated Current | 3A | |
| Rated Voltage | DC 125V | |
| Insulation Resistance (Minimum) | 100M Ω or more at DC500V | |
| Contact Resistance (Maximum) | $\leq 10m \Omega$ | |
| IP Protection Rating | IP 67 | |
| Contact Arrangement | Male | Female |
| |  |  |
| Note : Figure Male No. | | |

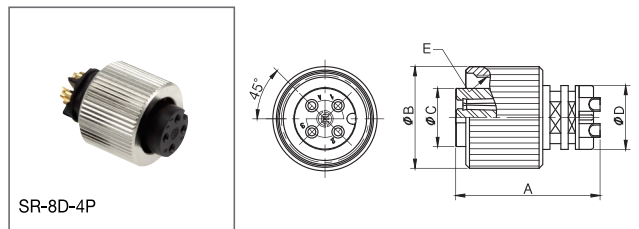
- ¹ Withstanding voltage is the tested voltage value in this table.
- ² Insulation resistance is measured at DC 100V.
- ³ Contact resistance is measured at DC 1A.
- Values are from tested items and may not apply to all connectors.
- Specifications subject to change without notice.
- Consult Sam Woo Electronics for the latest specifications.
- ⁴ Connector contact arrangement is from mating surface.

SR-8D-4J



| Product Number | A | ϕB | ϕC | ϕD | ϕE | F |
|----------------|------|----------|----------|----------|----------|-------------------|
| SR-8D-4J | 20,1 | 14 | 8,9 | 8,3 | 10,7 | M12 \times 1,0P |

SR-8D-4P



| Product Number | A | ϕB | ϕC | ϕD | E |
|----------------|------|----------|----------|----------|-------------------|
| SR-8D-4P | 20,2 | 14 | 8 | 9 | M12 \times 1,0P |

SR Series Mini-map



SR IP67 Series Cable Assembly



Features

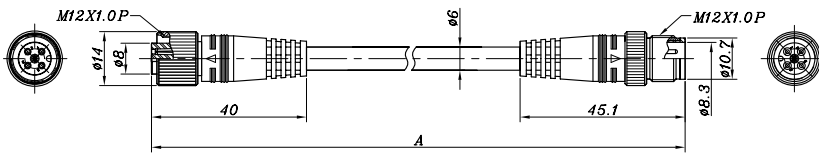
- Protection rating of IP67 with over molding
- M12 threaded locking
- Standard and Custom Design

Applications

- Factory Automation and Sensors
- Process control
- Industrial instrumentation
- Commercial electronics

■ SW-4366 | Type A : Plug + Jack

Unit : mm



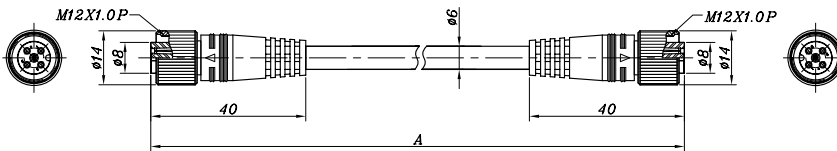
SR-8D-4P + Cable + SR-8D-4J

| Type A | | |
|----------------|---------------------|------|
| Product Number | Connector | A |
| SW-4366-001 | SR-8D-4P + SR-8D-4J | 1000 |
| SW-4366-002 | SR-8D-4P + SR-8D-4J | 2000 |
| SW-4366-003 | SR-8D-4P + SR-8D-4J | 3000 |
| SW-4366-005 | SR-8D-4P + SR-8D-4J | 5000 |

※ Custom lengths available, Consult Sam Woo Electronics,

■ SW-4369 | Type B : Plug + Plug

Unit : mm



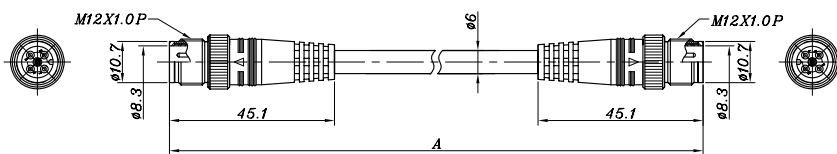
SR-8D-4P + Cable + SR-8D-4P

| Type B | | |
|----------------|---------------------|------|
| Product Number | Connector | A |
| SW-4369-001 | SR-8D-4P + SR-8D-4P | 1000 |
| SW-4369-002 | SR-8D-4P + SR-8D-4P | 2000 |
| SW-4369-003 | SR-8D-4P + SR-8D-4P | 3000 |
| SW-4369-005 | SR-8D-4P + SR-8D-4P | 5000 |

※ Custom lengths available, Consult Sam Woo Electronics,

■ SW-4370 | Type C : Jack + Jack

Unit : mm



SR-8D-4J + Cable + SR-8D-4J

| Type C | | |
|----------------|---------------------|------|
| Product Number | Connector | A |
| SW-4370-001 | SR-8D-4J + SR-8D-4J | 1000 |
| SW-4370-002 | SR-8D-4J + SR-8D-4J | 2000 |
| SW-4370-003 | SR-8D-4J + SR-8D-4J | 3000 |
| SW-4370-005 | SR-8D-4J + SR-8D-4J | 5000 |

※ Custom lengths available, Consult Sam Woo Electronics,

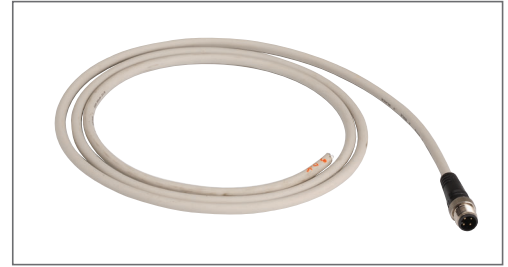
■ Standard Cable Information

| Standard Cable Specifications | |
|-------------------------------|-------------|
| Conductor AWG | 20 |
| No. of wires | 4 wires |
| Outer dia. | ø 6,0 ± 0,2 |
| Color | Grey |

| Standard Cable Specifications | |
|-------------------------------|------------|
| Contact Numbers | Wire Color |
| 1 | Brown |
| 2 | White |
| 3 | Blue |
| 4 | Black |

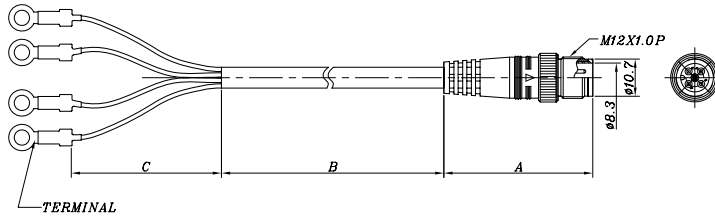
Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

■ Cable Assembly With Jack Connector



Unit : mm

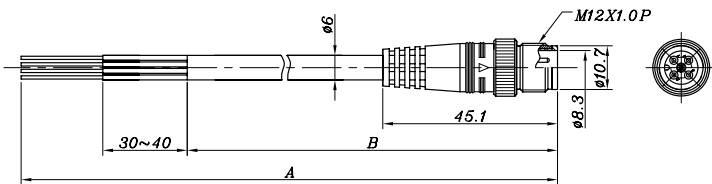
SW-4120 / Jack Connector



| Product Number | Connector | A | B | C |
|----------------|-----------|------|-----|----|
| SW-4120 | SR-8D-4J | 45,1 | 305 | 60 |

※ Custom lengths available, Consult Sam Woo Electronics,

SW-4367 / Jack Connector

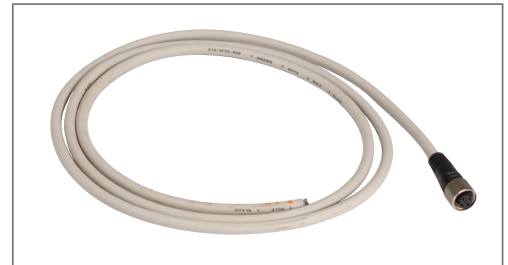


Unit : mm

| Product Number | Connector | A | B |
|----------------|-----------|------|------|
| SW-4367-0005 | SR-8D-4J | 550 | 500 |
| SW-4367-001 | SR-8D-4J | 1050 | 1000 |
| SW-4367-0022 | SR-8D-4J | 2200 | 2150 |
| SW-4367-003 | SR-8D-4J | 3050 | 3000 |
| SW-4367-005 | SR-8D-4J | 5050 | 5000 |

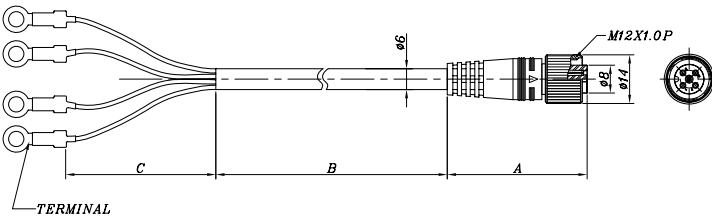
※ Custom lengths available, Consult Sam Woo Electronics,

■ Cable Assembly With Plug Connector



Unit : mm

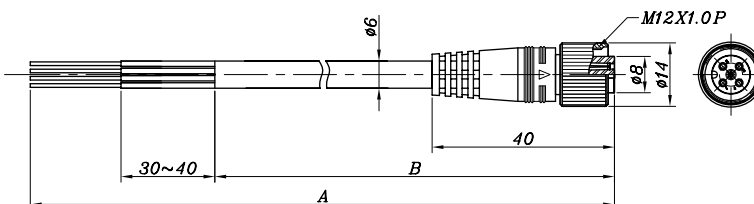
SW-4368 / Plug Connector



| Product Number | Connector | A | B | C |
|----------------|-----------|----|-----|----|
| SW-4368 | SR-8D-4P | 40 | 305 | 60 |

※ Custom lengths available, Consult Sam Woo Electronics,

SW-4119 / Plug Connector



Unit : mm

| Product Number | Connector | A | B |
|----------------|-----------|------|------|
| SW-4119-0005 | SR-8D-4P | 550 | 500 |
| SW-4119-001 | SR-8D-4P | 1050 | 1000 |
| SW-4119-0022 | SR-8D-4P | 2200 | 2150 |
| SW-4119-003 | SR-8D-4P | 3050 | 3000 |
| SW-4119-0047 | SR-8D-4P | 4700 | 4640 |
| SW-4119-005 | SR-8D-4P | 5050 | 5000 |

※ Custom lengths available, Consult Sam Woo Electronics,

Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.

SRC Series Part Numbering



Features

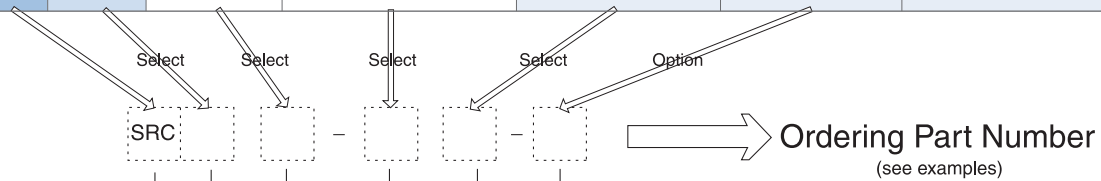
- Bayonet Locking System
- Rugged
- Light-weight
- Low cost
- General purpose

Applications

- Professional Audio / Video
- Vision Testing
- Factory Automation
- Measuring Equipment
- Medical

Part Numbering

| Product Number | | Size | Number of Contacts | Suffix (Contact Type) | Optional Suffix | Notes |
|----------------|---------------|------|--------------------|-----------------------|-----------------|---------------------|
| Series | Prefix (Body) | | | | G | |
| SRC | 6A | 21 | 10,16,26 | P | ● | Plug (Male) |
| | | | | S | ● | Plug (Female) |
| | 2A | | | P | ● | Receptacle (Male) |
| | | | | S | ● | Receptacle (Female) |
| | A | | | PS | ● | Adapter (Round) |
| | AP | | PS | ● | Adapter (Panel) | |



Connector Series

- SRC6A - Plug
- SRC2A - Receptacle
- SRCA - Adapter (Round Type)
- SRCAP - Adapter (Panel Type)

Size

21

No. of Contacts

10,16,26

Contact Type

- P : Male
- S : Female
- PS : Male and Female

Shell Type

G : Gold plating contact

Examples

SRC6A 21 - 10 P

SRC series Plug - Size 21 Plug - 10 Male Contact

SRC2A 21 - 16 S

SRC series Receptacle - Size 21 Receptacle - 16 Female Contact

SRCA 21 - 26 PS

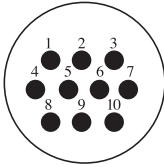
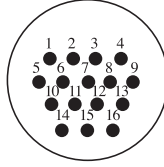
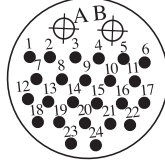
SRC series Round Adapter - Size 21 Adapter - 26 Male & Female Contact

SRCAP 21 - 16 PS - G

SRC series Panel Adapter - Size 21 Adapter - 16 Male & Female Contact - Gold Plating Contact

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Major Performances / Contact Arrangements

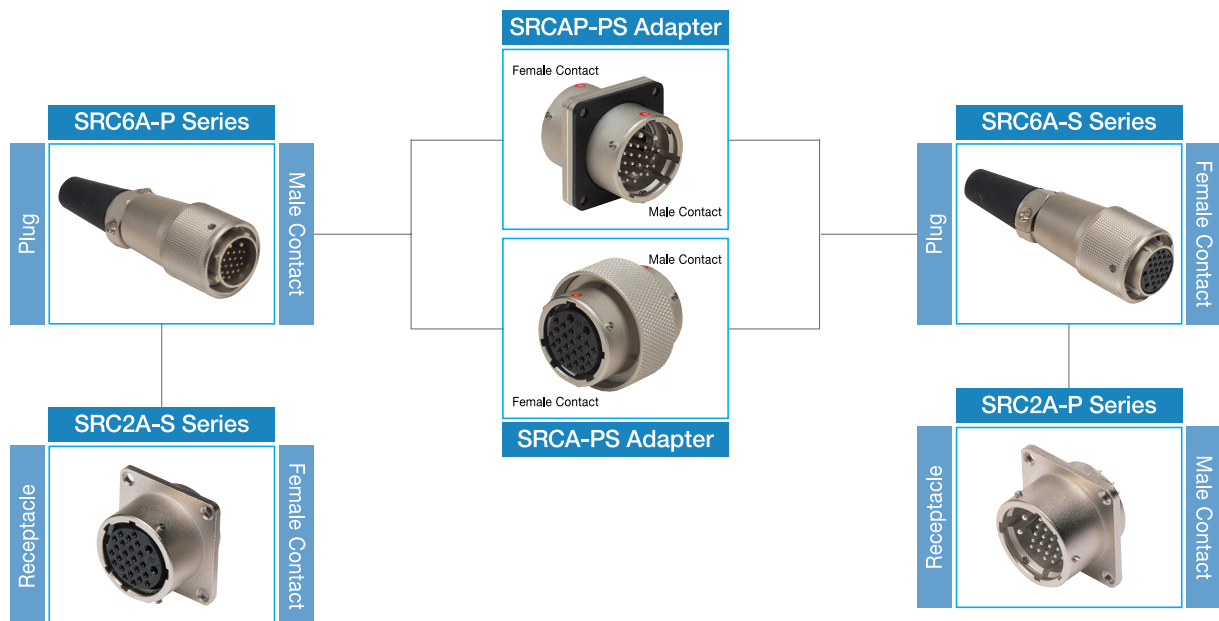
| Performance | Size / No. of Contacts | Size 21 | | |
|--|------------------------|---|--|---|
| | | 10 | 16 | 26 |
| Withstanding Voltage (per min) ¹ | | AC 1000V | AC 1000V | AC 1000V |
| Current | | 10A | 5A | 5A / 10A |
| Insulation Resistance (Minimum) ² | | 1,000M Ω | 1,000M Ω | 1,000M Ω |
| Contact Resistance (Maximum) ³ | | 5m Ω | 5m Ω | 5m Ω |
| Solder Pot Inside Diameter | | ∅ 1,5 | ∅ 1,0 | ∅ 1,0 / ∅ 1,5 |
| Wire Gauge (Maximum) | | AWG18 | AWG20 | AWG20 / AWG18 |
| Contact Arrangement | |  |  |  |

! ¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
 • Specifications subject to change without notice.
 • Consult Sam Woo Electronics for the latest specifications.
⁴ Connector contact arrangement is from mating surface.

■ Material Used / Finish

| | Material | Finish |
|-----------|---------------------|--------------------|
| Body | Alluminum alloy | Ni or Gold Plating |
| Insulator | Thermosetting resin | Black |
| Contacts | Male | Brass |
| | Female | Phosphor bronze |

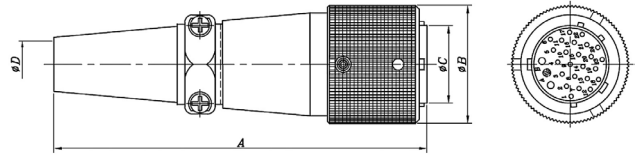
■ SRC Series Mini-map



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SRC Series Male / Female Plug, Receptacle, Adapter

■ SRC6A Plug



| Product Number | A | ∅ B | ∅ C | ∅ D |
|----------------|------|------|------|------|
| SRC6A21-10P | 98,0 | 31,0 | 20,4 | 12,2 |
| SRC6A21-16P | | | | |
| SRC6A21-26P | | | | |
| SRC6A21-10P-G | | | | |
| SRC6A21-16P-G | | | | |
| SRC6A21-26P-G | | | | |

■ SRC6A Plug

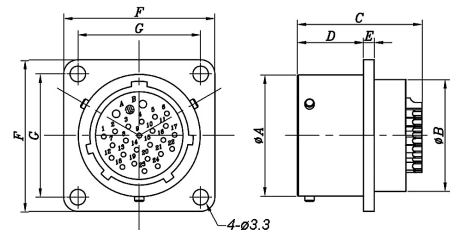


| Product Number | A | ∅ B | ∅ C | ∅ D |
|----------------|------|------|------|------|
| SRC6A21-10S | 98,0 | 31,0 | 20,4 | 12,2 |
| SRC6A21-16S | | | | |
| SRC6A21-26S | | | | |
| SRC6A21-10S-G | | | | |
| SRC6A21-16S-G | | | | |
| SRC6A21-26S-G | | | | |

■ SRC2A Receptacle



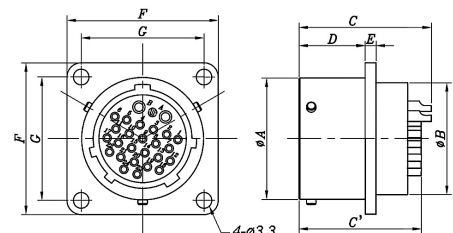
| Product Number | ∅ A | ∅ B | C | D | E | F | G |
|----------------|------|------|------|----|-----|----|----|
| SRC2A21-10P | 25,6 | 23,6 | 26,4 | 14 | 2,3 | 32 | 26 |
| SRC2A21-16P | | | | | | | |
| SRC2A21-26P | | | | | | | |
| SRC2A21-10P-G | | | | | | | |
| SRC2A21-16P-G | | | | | | | |
| SRC2A21-26P-G | | | | | | | |



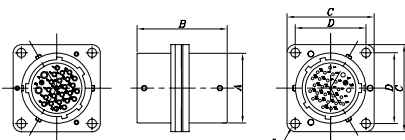
■ SRC2A Receptacle



| Product Number | ∅ A | ∅ B | C(C') | D | E | F | G |
|----------------|------|------|----------------|----|-----|----|----|
| SRC2A21-10S | 25,6 | 23,6 | 27,7 (25,5) | 14 | 2,3 | 32 | 26 |
| SRC2A21-16S | | | | | | | |
| SRC2A21-26S | | | | | | | |
| SRC2A21-10S-G | | | | | | | |
| SRC2A21-16S-G | | | | | | | |
| SRC2A21-26S-G | | | | | | | |

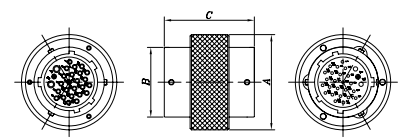


■ SRCAP Adapter (Panel, Male to Female)



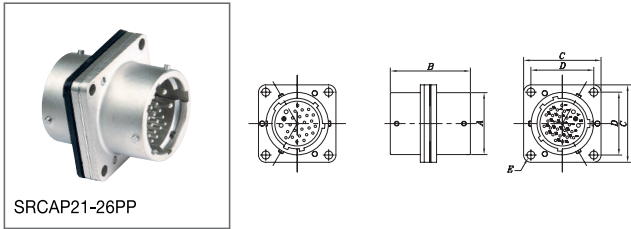
| Product Number | ∅ A | B | C | D | E |
|----------------|------|----|----|----|---------|
| SRCAP21-10PS | 25,6 | 33 | 32 | 26 | 4-∅ 3,3 |
| SRCAP21-16PS | | | | | |
| SRCAP21-26PS | | | | | |
| SRCAP21-10PS-G | | | | | |
| SRCAP21-16PS-G | | | | | |
| SRCAP21-26PS-G | | | | | |

■ SRCA Adapter (Round, Male to Female)



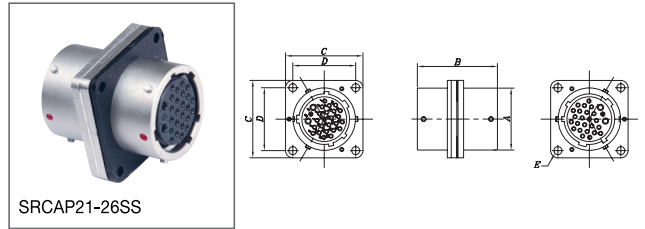
| Product Number | ∅ A | ∅ B | C |
|----------------|-----|------|------|
| SRCA21-10PS | 35 | 25,6 | 35,0 |
| SRCA21-16PS | | | |
| SRCA21-26PS | | | |
| SRCA21-10PS-G | | | |
| SRCA21-16PS-G | | | |
| SRCA21-26PS-G | | | |

■ SRCAP Adapter (Panel, Male to Male)



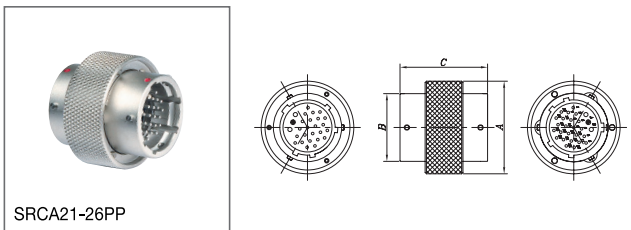
| Product Number | ∅ A | B | C | D | E |
|----------------|------|----|----|----|-----------|
| SRCAP21-10PP | 25,6 | 33 | 32 | 26 | 4 - ∅ 3,3 |
| SRCAP21-16PP | | | | | |
| SRCAP21-26PP | | | | | |
| SRCAP21-10PP-G | | | | | |
| SRCAP21-16PP-G | | | | | |
| SRCAP21-26PP-G | | | | | |

■ SRCAP Adapter (Panel, Female to Female)



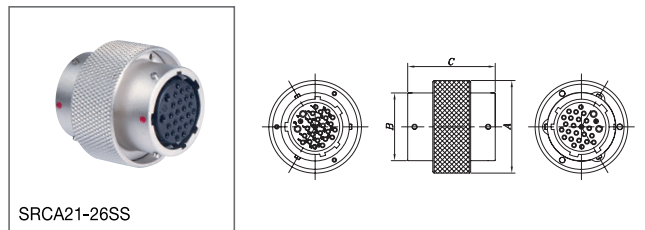
| Product Number | ∅ A | B | C | D | E |
|----------------|------|----|----|----|-----------|
| SRCAP21-10SS | 25,6 | 33 | 32 | 26 | 4 - ∅ 3,3 |
| SRCAP21-16SS | | | | | |
| SRCAP21-26SS | | | | | |
| SRCAP21-10SS-G | | | | | |
| SRCAP21-16SS-G | | | | | |
| SRCAP21-26SS-G | | | | | |

■ SRCA Adapter (Round, Male to Male)



| Product Number | ∅ A | ∅ B | C |
|----------------|-----|------|------|
| SRCA21-10PP | 35 | 25,6 | 35,0 |
| SRCA21-16PP | | | |
| SRCA21-26PP | | | |
| SRCA21-10PP-G | | | |
| SRCA21-16PP-G | | | |
| SRCA21-26PP-G | | | |

■ SRCA Adapter (Round, Female to Female)



| Product Number | ∅ A | ∅ B | C |
|----------------|-----|------|------|
| SRCA21-10SS | 35 | 25,6 | 35,0 |
| SRCA21-16SS | | | |
| SRCA21-26SS | | | |
| SRCA21-10SS-G | | | |
| SRCA21-16SS-G | | | |
| SRCA21-26SS-G | | | |



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



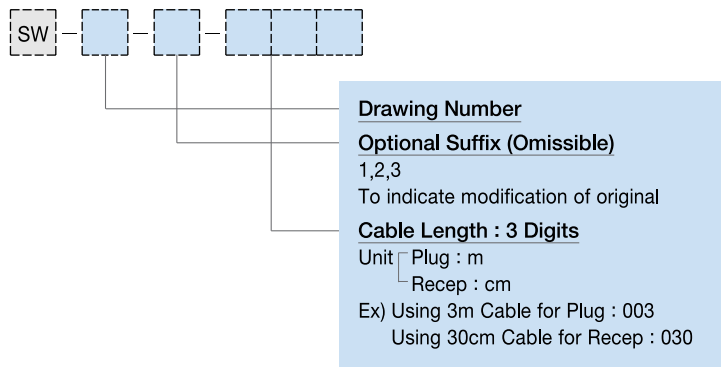
Features

- Bayonet Locking System
- Rugged
- Light-weight
- Low cost
- General purpose
- Standard and Custom Design

Applications

- Professional Audio / Video
- Vision Testing
- Factory Automation
- Measuring Equipment
- Medical

Part Numbering



Plug Cable Assembly



| Type | Construction |
|------|---------------------------------------|
| A | SRC Connector + Cable + Housing |
| B | SRC Connector + Cable + SRC Connector |

※ Design and Customization Service Available

Receptacle Cable Assembly



| Type | Construction |
|------|--|
| A | SRC Connector + wire + open end |
| B | SRC Connector + wire + Housing |
| C | SRC Connector + wire + Housing with core |

※ Design and Customization Service Available

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



ST Series Part Numbering



Features

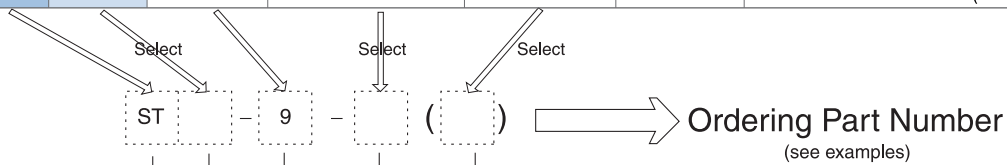
- Super-miniature size with multiple contact
- Safe insert system preventing male damage

Applications

- Professional A/V
- Measuring equipment
- Sensors
- Wireless radio
- Medical

Part Numbering

| Product Number | | Size | Number of Contacts | Suffix | Mount Type | Notes | |
|----------------|--------|----------|--------------------|------------------------------------|---------------|--|--------------------------------------|
| Series | Prefix | | | | | | |
| ST | H | 8 or 8B | 14 | P | Screw-on | Main ST series Plug | |
| | | | | R/RPCB | | ST Receptacle | |
| | | | | RGPCB | | ST Receptacle (PCB termination with ground male) | |
| | | | | P | | STH Series Plug | |
| | | | | R/RPCB | | STH Receptacle | |
| | | | | RGPCB | | ST Receptacle (PCB termination with ground male) | |
| | H | 9 | 12,16,20 | P | | Main ST series Plug | |
| | | | | PLM1 | | Molding Type ST Plug | |
| | | | | R/RPCB | | ST Receptacle | |
| | | | | P | | STH Series Plug | |
| | | | | PLM1 | | Molding Type STH Plug | |
| | | | | R/RPCB | | STH Receptacle | |
| | A | HA | 9A | P | | Push-pull | STA Series (Adapter for ST series) |
| | HA | | | | | | STHA Series (Adapter for STH series) |
| A | 9A | 12,16,20 | R/RPCB | Main ST series Plug | | | |
| | | | | blank | ST Receptacle | | |
| A | 9A | 12,16,20 | blank | STA Series (Adapter for ST series) | | | |



Examples

- ST - 9 - 12 (P)
ST series - Size 9 Plug - 12 Male Contact
- ST - 9 - 16 (R)
ST series - Size 9 Receptacle - 16 Solder Type Female Contact
- ST - 9 - 16 (RPCB)
ST series - Size 9 Receptacle - 16 PCB Type Female Contact
- STA - 9 - 20
Adapter for ST series - Size 9 Adapter - 20 Female Contact
- STHA - 9 - 20
Adapter for STH series - Size 9 Adapter - 20 Male Contact

Connector Series

- ST series
- STH - reverse contact
- STA - adapter for ST series
- STHA - adapter for STH series

Size

- 8,8B,9 - Screw-on Type
- 9A - Push-pull Type

No. of Contacts

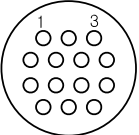
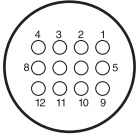
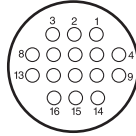
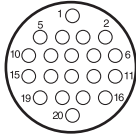
- 12,14,16,20

Shell Type

- P : Plug
- R : Receptacle (solder termination)
- RPCB : Receptacle (PCB termination)
- RGPCB : Receptacle (PCB termination with grounding male)
- blank : Adapter

Specifications subject to change without notice.
Consult Sam Woo Electronics for the latest specifications.

■ Major Performances / Contact Arrangements

| Performance | Size / No. of Contacts | | Size 8 | | |
|--|------------------------|--|---|--|---|
| | | | 14 | | |
| Withstanding Voltage (per min) | | | AC 300V | | |
| Current | | | 1A | | |
| Insulation Resistance (Minimum) | | | 1,000M Ω | | |
| Contact Resistance (Maximum) | | | 30m Ω | | |
| Solder Pot Inside Diameter | | | ∅ 0,5 | | |
| Wire Gauge (Maximum) | | | AWG28 | | |
| Contact Arrangement | | |  Plug | | |
| Performance | Size / No. of Contacts | | Size 9, 9A | | |
| | | | 12 | 16 | 20 |
| Withstanding Voltage (per min) ¹ | | | AC 300V | AC 300V | AC 300V |
| Current | | | 1A | 1A | 1A |
| Insulation Resistance (Minimum) ² | | | 1,000M Ω | 1,000M Ω | 1,000M Ω |
| Contact Resistance (Maximum) ³ | | | 30m Ω | 30m Ω | 30m Ω |
| Solder Pot Inside Diameter | | | ∅ 0,5 | ∅ 0,5 | ∅ 0,5 |
| Wire Gauge (Maximum) | | | AWG28 | AWG28 | AWG28 |
| Contact Arrangement | | |  Receptacle |  Receptacle |  Receptacle |

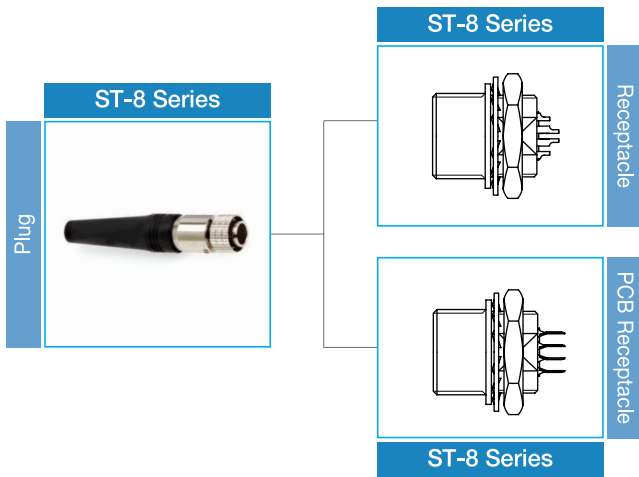
¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
 • Specifications subject to change without notice.
 • Consult Sam Woo Electronics for the latest specifications.
⁴ Connector contact arrangement is from solder pot.

■ Material Used / Finish

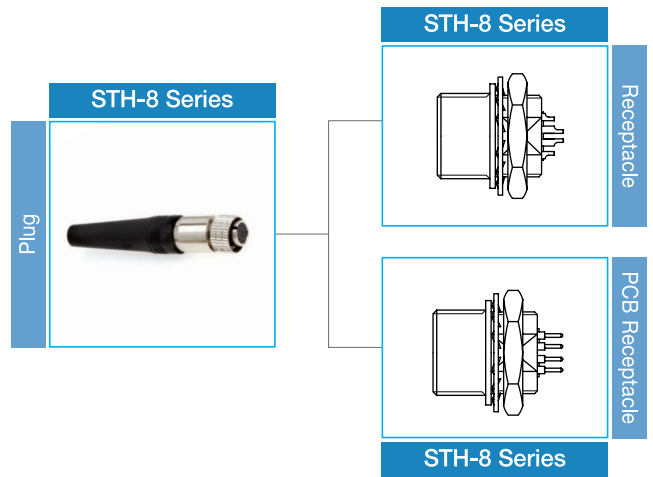
| | Material | Finish |
|-----------|--------------------|-------------------------------|
| Body | Brass & Zinc alloy | Ni Plating |
| Insulator | PPS resin | Black |
| Contacts | Male | Phosphor bronze and Beryllium |
| | Female | Phosphor bronze |

ST Series **Screw-on Type** mini-map

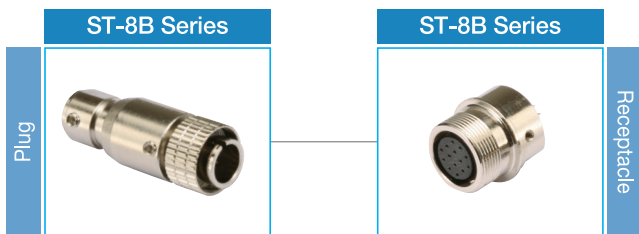
■ ST-8 Series



■ STH-8 Series



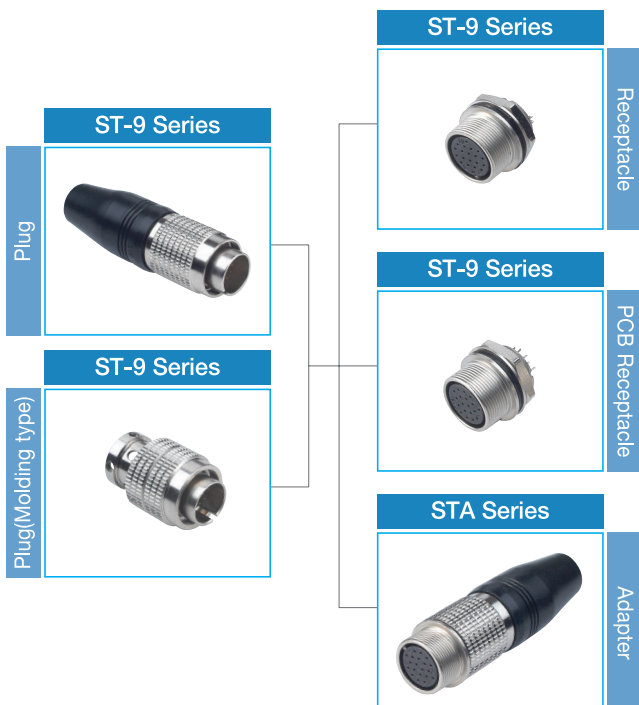
■ ST-8B Series



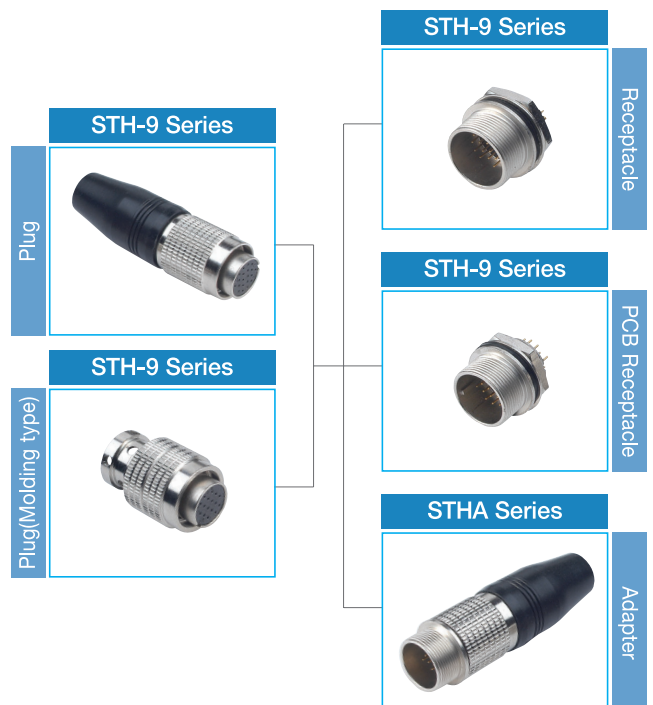
■ STH-8B Series



■ ST-9 Series

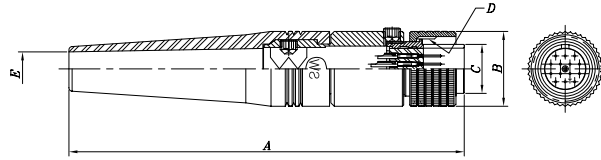


■ STH-9 Series



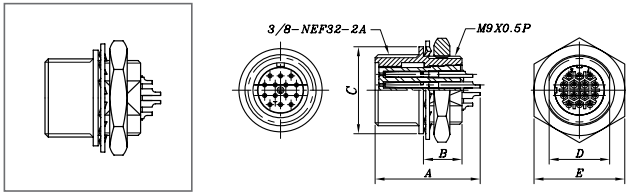
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ ST-8 Plug



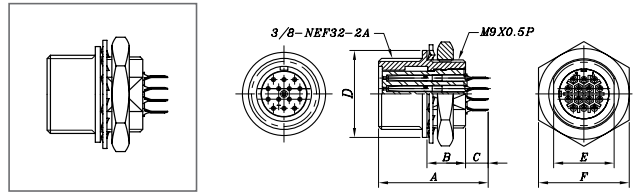
| Product Number | A | B | C | D | E |
|----------------|----|----|-----|--------------|---|
| ST-8-14(P) | 58 | 11 | 7,2 | 3/8-32NEF-2B | 5 |

■ ST-8 solder Type Receptacle



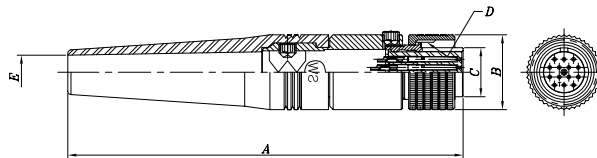
| Product Number | A | B | C | D | E |
|----------------|------|-----|------|---|----|
| ST-8-14(R) | 13,9 | 5,1 | 11,5 | 8 | 12 |

■ ST-8 PCB Type Receptacle



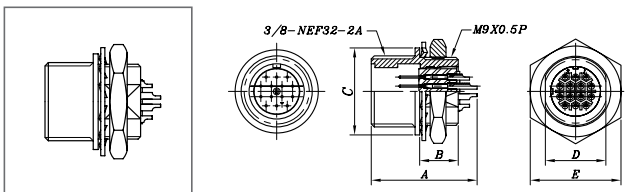
| Product Number | A | B | C | D | E | F |
|----------------|------|-----|---|------|---|----|
| ST-8-14(RPCB) | 14,5 | 5,1 | 3 | 11,5 | 8 | 12 |

■ STH-8 Plug



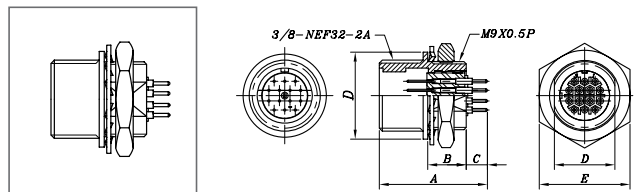
| Product Number | A | B | C | D | E |
|----------------|----|----|-----|--------------|---|
| STH-8-14(P) | 58 | 11 | 7,2 | 3/8-32NEF-2B | 5 |

■ STH-8 solder Type Receptacle



| Product Number | A | B | C | D | E |
|----------------|----|-----|------|---|----|
| STH-8-14(R) | 14 | 5,1 | 11,5 | 8 | 12 |

■ STH-8 PCB Type Receptacle



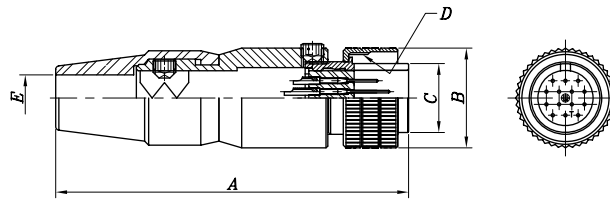
| Product Number | A | B | C | D | E | F |
|----------------|------|-----|-----|------|---|----|
| STH-8-14(RPCB) | 14,3 | 5,1 | 2,8 | 11,5 | 8 | 12 |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

ST-8B Series

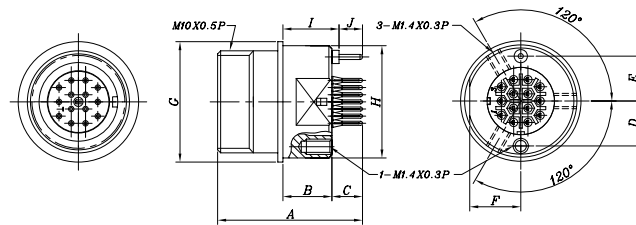
Screw-on Type Male / Female Plug, Receptacle

ST-8B Plug



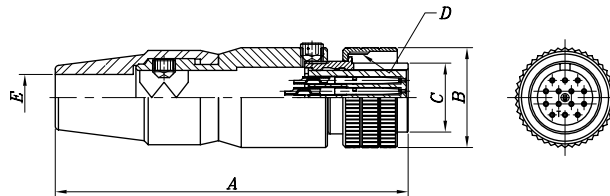
| Product Number | A | B | C | D | E |
|----------------|------|----|-----|----------|-----|
| ST-8B-14(P) | 38,9 | 11 | 7,6 | M14×1,0P | 5,1 |

ST-8B Receptacle



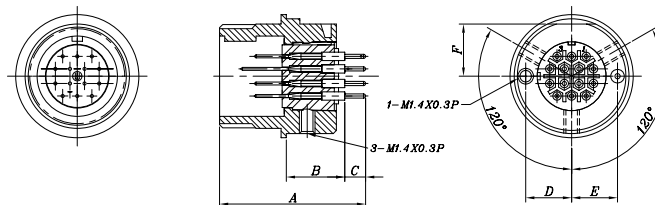
| Product Number | A | B | C | D | E | F | G | H | I | J |
|-----------------|------|-----|---|-----|-----|---|------|-------|-----|-----|
| ST-8B-14(RGPCB) | 14,2 | 4,8 | 3 | 4,4 | 4,4 | 5 | 11,8 | 10,95 | 5,5 | 2,3 |

STH-8B Plug



| Product Number | A | B | C | D | E |
|----------------|------|----|-----|----------|-----|
| STH-8B-14(P) | 38,9 | 11 | 7,6 | M14×1,0P | 5,1 |

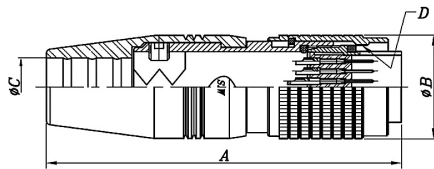
STH-8B Receptacle



| Product Number | A | B | C | D | E | F | G | H | I | J |
|------------------|------|-----|---|-----|-----|---|------|-------|-----|-----|
| STH-8B-14(RGPCB) | 14,2 | 4,8 | 3 | 4,4 | 4,4 | 5 | 11,8 | 10,95 | 5,5 | 2,3 |

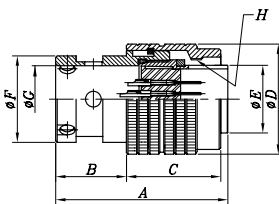
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ ST-9 Plug



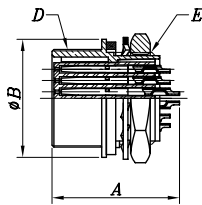
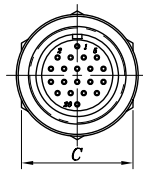
| Product Number | A | Ø B | Ø C | D |
|----------------|------|------|-----|------------|
| ST-9-12(P) | | | | |
| ST-9-16(P) | 43,0 | 12,5 | 7,0 | M10,5×0,5P |
| ST-9-20(P) | | | | |

■ ST-9 Molding Type Plug



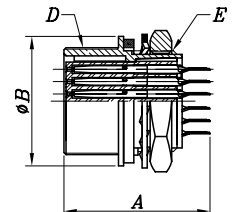
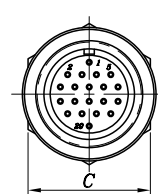
| Product Number | A | B | C | Ø D | Ø E | Ø F | Ø G | H |
|----------------|----|---|----|-----|-----|-----|-----|------------|
| ST-9-12(PLM1) | | | | | | | | |
| ST-9-16(PLM1) | 22 | 9 | 12 | 14 | 8,6 | 11 | 8,5 | M10,5×0,5P |
| ST-9-20(PLM1) | | | | | | | | |

■ ST-9 Solder Type Receptacle



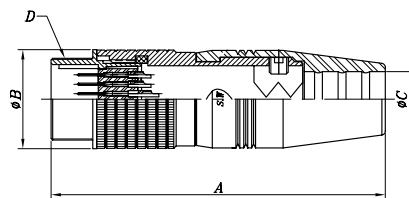
| Product Number | A | Ø B | C | D | E |
|----------------|------|------|------|------------|-----------|
| ST-9-12(R) | | | | | |
| ST-9-16(R) | 13,6 | 12,6 | 12,0 | M10,5×0,5P | M10×0,75P |
| ST-9-20(R) | | | | | |

■ ST-9 PCB Type Receptacle



| Product Number | A | Ø B | C | D | E |
|----------------|------|------|------|------------|-----------|
| ST-9-12(RPCB) | | | | | |
| ST-9-16(RPCB) | 14,1 | 12,6 | 12,0 | M10,5×0,5P | M10×0,75P |
| ST-9-20(RPCB) | | | | | |

■ STA-9 Adapter

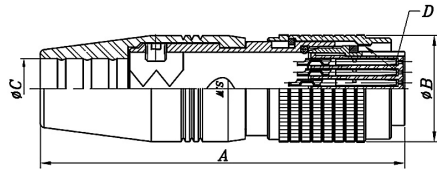


| Product Number | A | Ø B | Ø C | D |
|----------------|------|------|-----|------------|
| STA-9-12 | | | | |
| STA-9-16 | 42,6 | 12,6 | 7,0 | M10,5×0,5P |
| STA-9-20 | | | | |

ST-9 Series

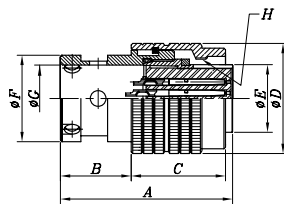
Screw-on type Male / Female Plug, Receptacle, Adapter

■ STH-9 Plug



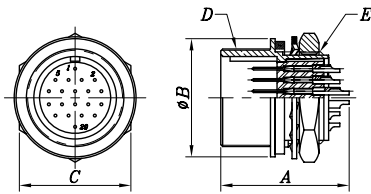
| Product Number | A | ∅ B | ∅ C | D |
|----------------|------|------|-----|------------|
| STH-9-12(P) | | | | |
| STH-9-16(P) | 43,0 | 12,5 | 7,0 | M10,5×0,5P |
| STH-9-20(P) | | | | |

■ STH-9 Molding Type Plug



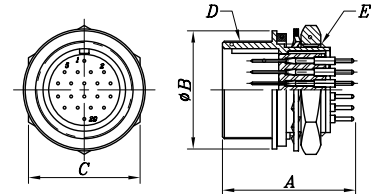
| Product Number | A | B | C | ∅ D | ∅ E | ∅ F | ∅ G | H |
|----------------|----|---|----|-----|-----|-----|-----|------------|
| STH-9-12(PLM1) | | | | | | | | |
| STH-9-16(PLM1) | 22 | 9 | 12 | 14 | 8,6 | 11 | 8,5 | M10,5×0,5P |
| STH-9-20(PLM1) | | | | | | | | |

■ STH-9 Solder Type Receptacle



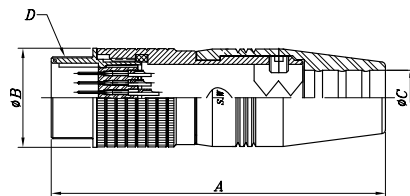
| Product Number | A | ∅ B | C | D | E |
|----------------|------|------|------|------------|-----------|
| STH-9-12(R) | | | | | |
| STH-9-16(R) | 13,6 | 12,6 | 12,0 | M10,5×0,5P | M10×0,75P |
| STH-9-20(R) | | | | | |

■ STH-9 PCB Type Receptacle



| Product Number | A | ∅ B | C | D | E |
|----------------|------|------|------|------------|-----------|
| STH-9-12(RPCB) | | | | | |
| STH-9-16(RPCB) | 14,1 | 12,6 | 12,0 | M10,5×0,5P | M10×0,75P |
| STH-9-20(RPCB) | | | | | |

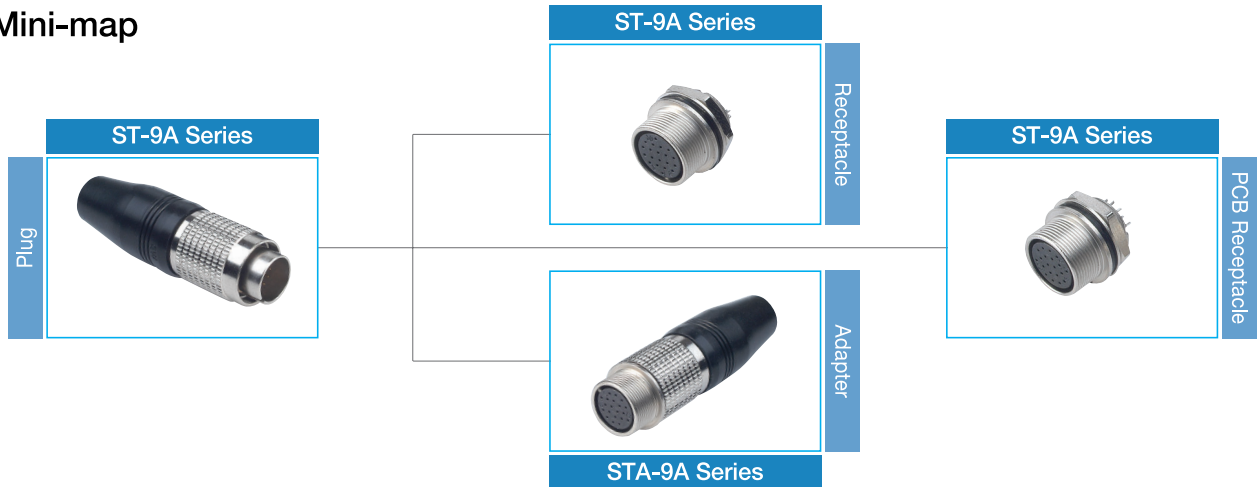
■ STHA-9 Adapter



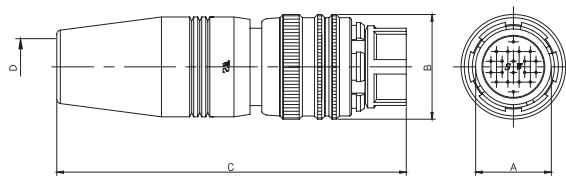
| Product Number | A | ∅ B | ∅ C | D |
|----------------|------|------|-----|------------|
| STHA-9-12 | | | | |
| STHA-9-16 | 42,6 | 12,6 | 7,0 | M10,5×0,5P |
| STHA-9-20 | | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Mini-map

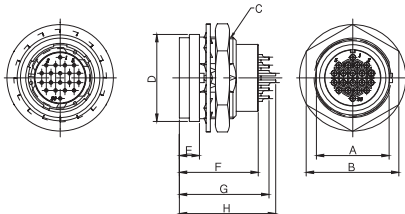


■ ST-9A Plug



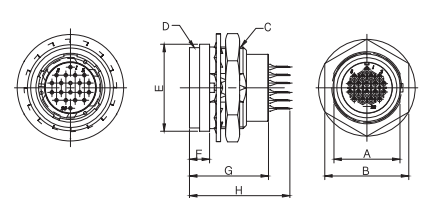
| Product Number | ∅ A | ∅ B | C | ∅ D |
|----------------|-----|-----|--------|-----|
| ST-9A-12(P) | 9,4 | 13 | (43,4) | 7 |
| ST-9A-16(P) | | | | |
| ST-9A-20(P) | | | | |

■ ST-9A Receptacle



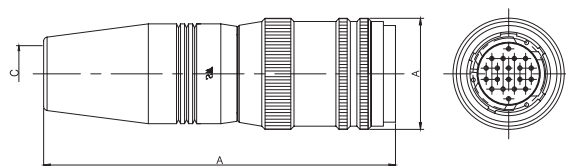
| Product Number | A | B | C | ∅ D | E | F | G | H |
|----------------|----|----|-----------|-----|---|------|------|------|
| ST-9A-12(R) | 11 | 14 | M12×0,75P | 13 | 3 | 11,8 | 13,4 | 14,4 |
| ST-9A-16(R) | | | | | | | | |
| ST-9A-20(R) | | | | | | | | |

■ ST-9A PCB Receptacle



| Product Number | A | B | C | D | ∅ E | F | G | H |
|----------------|----|----|-----------|-----------|-----|---|------|----|
| ST-9A-12(RPCB) | 11 | 14 | M10×0,75P | M10×0,75P | 13 | 3 | 11,8 | 15 |
| ST-9A-16(RPCB) | | | | | | | | |
| ST-9A-20(RPCB) | | | | | | | | |

■ STA-9A Adapter



| Product Number | ∅ A | B | ∅ C |
|----------------|------|--------|-----|
| STA-9A-12(P) | 13,8 | (43,7) | 7 |
| STA-9A-16(P) | | | |
| STA-9A-20(P) | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

ST Series Cable Assembly Instruction

General Instruction / Information

- Diagram 1 shows a sample wiring for ST series.
- Soldering must be done quickly and carefully to prevent damage to insulator.
- Receptacles do not require additional instructions.
- Specification of Nut

| Size | Nut Specification | Nut tightening force |
|---------|-------------------|----------------------|
| ST - 9 | M10×0,75P | 20~23(kgf · cm) |
| ST - 9A | M12×0,75P | 20~23(kgf · cm) |

Wiring Sequence

- ① Select cable according to outer diameter and cross section, lower than 0,08mm²(AWG#28).
- ② Insert RUBBER BUSHING to cable.
- ③ Insert PLUG HOUSING to cable.
- ④ Strip cable per dimension given and loosen braid.
- ⑤ Secure PLUG BODY to jig for soldering.
- ⑥ Solder stripped cable to pin.
- ⑦ Fasten CRIMP using hand crimp tool (SA-HCT^①)
- ⑧ Lock PLUG HOUSING and PLUG BODY using tightening force displayed on Table 1.
- ⑨ Tighten WRENCH BOLT using 0,3N force onto one of two embossed parts of crimp.
- ⑩ Cover RUBBER BUSHING onto PLUG HOUSING.

^① See below for information on SA-HCT.

Diagram 1

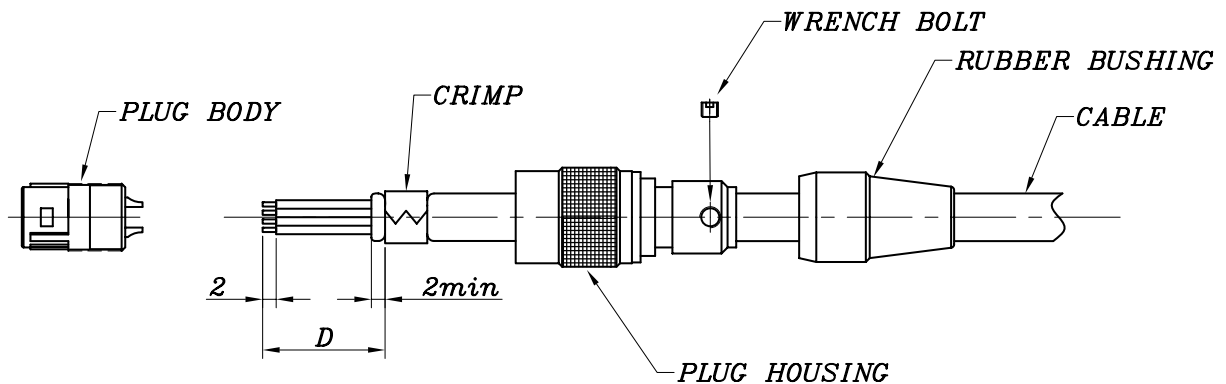


Table 1

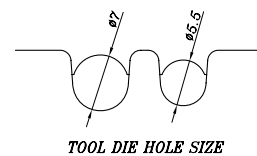
unit : mm

| Size | Spanner Jaw | D (Dimension) | Tightening Force | Notes |
|------|-------------|---------------|-----------------------|------------------------|
| ST | 10 | 15 | 1,0N · m (10kgf · cm) | SA-HCT size ϕ 7,0 |

SA-HCT (Hand Crimp Tool)

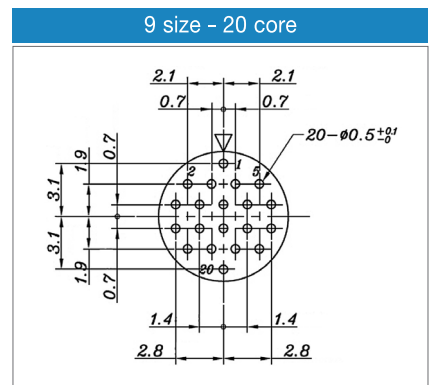
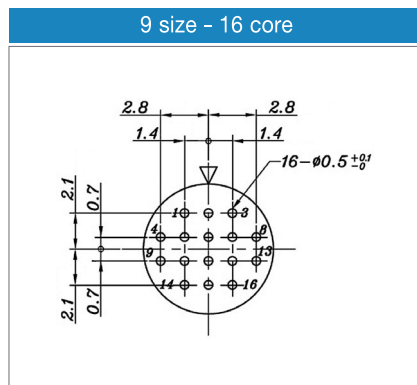
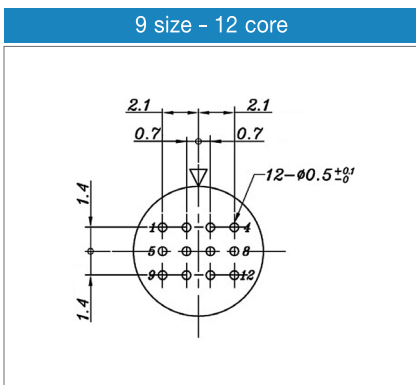
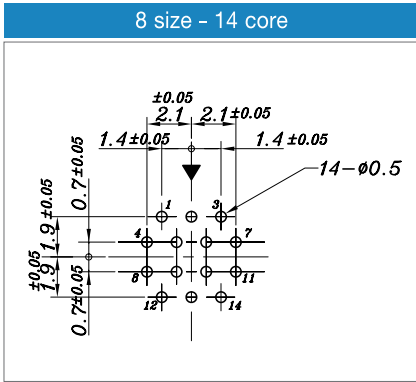


Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.

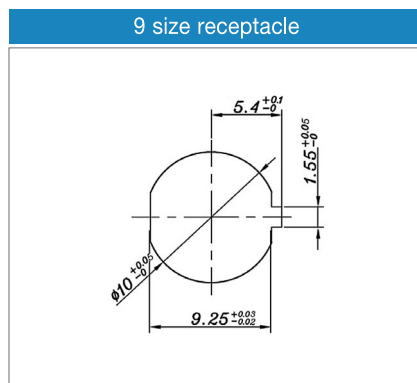
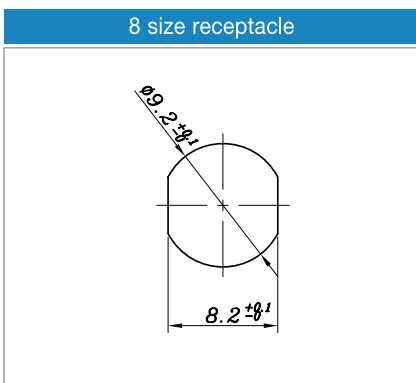


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ ST Receptacle PCB Hole Layout



■ ST Receptacle Panel Layout



ST Series Cable Assembly



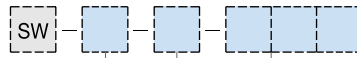
Features

- Super-miniature size with multiple contact
- Safe insert system preventing male damage
- Standard and Custom Design

Applications

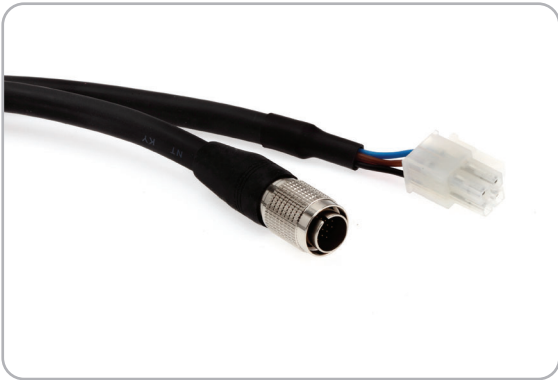
- Professional A/V
- Measuring equipment
- Sensors
- Wireless radio
- Medical

Part Numbering



Drawing Number
Optional Suffix (Omissible)
 1,2,3
 To indicate modification of original
Cable Length : 3 Digits
 Unit Plug : m
 Recep : cm
 Ex) Using 3m Cable for Plug : 003
 Using 30cm Cable for Recep : 030

Plug Cable Assembly



| Type | Construction |
|------|-------------------------------------|
| A | ST Connector + Cable + Housing |
| B | ST Connector + Cable + ST Connector |

※ Design and Customization Service Available

Receptacle Cable Assembly



| Type | Construction |
|------|---|
| A | ST Connector + wire + open end |
| B | ST Connector + wire + Housing |
| C | ST Connector + wire + Housing with core |

※ Design and Customization Service Available

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



ST IP67 Series

Part Numbering



Features

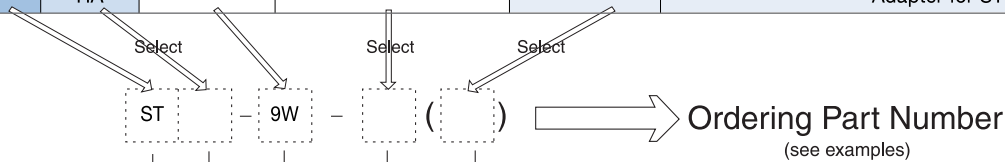
- Super-miniature size with multiple contact
- Safe insert system preventing pin damage
- Protection rating of IP67 with over molding

Applications

- Professional A/V
- Measuring equipment
- Sensors
- Wireless radio
- Medical

Part Numbering

| Product Number | | Size | Number of Contacts | Suffix | Notes |
|----------------|--------|------|--------------------|------------------------|----------------------|
| Series | Prefix | | | | |
| ST | H | 9W | 12,16,20 | P | ST series Plug |
| | | | | PLM | Molding Type ST Plug |
| | | | | R/RPCB | ST Receptacle |
| | | | | P | STH series Plug |
| | PLM | | | Molding Type STH Plug | |
| | R/RPCB | | | STH Receptacle | |
| | A | | | Adapter for ST series | |
| | HA | | | Adapter for STH series | |



Connector Series
 ST series
 STH - reverse contact
 STA - adapter for ST series
 STHA - adapter for STH series

Size & IP67 type
 9W

No. of Contacts
 12,16,20

Shell Type
 P : Plug
 R : Receptacle
 RPCB : Receptacle (PCB termination)
 PLM : Plug (Molding type)
 blank : Adapter

Examples

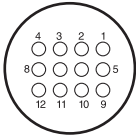
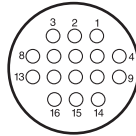
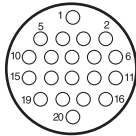
ST - 9W - 12 (P)
 ST IP67 Series - Size 9 Plug -12 Male Contact

STH - 9W - 16 (R)
 STH IP67 Series - Size 9 Receptacle - 16 Female Contact

STA - 9W - 20
 Adapter for ST IP67 Series - Size 9 Adapter - 20 Female Contact

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Major Performances / Contact Arrangements

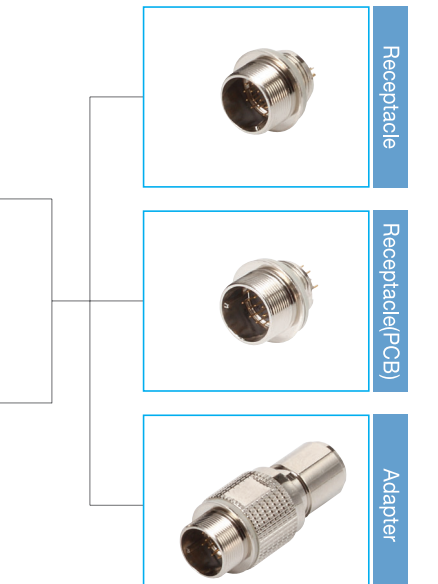


| Performance | Size / No. of Contacts | | |
|--|---|--|---|
| | 12 | 16 | 20 |
| Withstanding Voltage (per min) ¹ | AC 300V | AC 300V | AC 300V |
| Current | 1A | 1A | 1A |
| Insulation Resistance (Minimum) ² | 1,000M Ω | 1,000M Ω | 1,000M Ω |
| Contact Resistance (Maximum) ³ | 30m Ω | 30m Ω | 30m Ω |
| Solder Pot Inside Diameter | ∅ 0,5 | ∅ 0,5 | ∅ 0,5 |
| Wire Gauge (Maximum) | AWG28 | AWG28 | AWG28 |
| Contact Arrangement |  Receptacle |  Receptacle |  Receptacle |
| IP Protection Rating | IP 67 | | |

¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
 • Specifications subject to change without notice.
 • Consult Sam Woo Electronics for the latest specifications.
⁴ Connector contact arrangement is from solder pot.

■ Material Used / Finish

| | | Material | Finish |
|-----------|--------|-------------------------------|--------------|
| Body | | Brass & Zinc alloy | Ni Plating |
| Insulator | | PPS resin | Black |
| Contacts | Male | Phosphor bronze and Beryllium | Gold Plating |
| | Female | Phosphor bronze | Gold Plating |

■ ST IP67 Series Mini-map

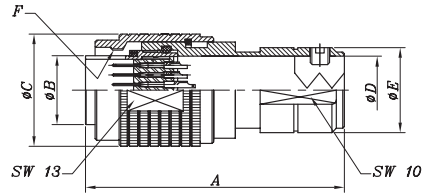
| ST-9W IP67 Series | | | STH-9W IP67 Series | | |
|---|---|---|--|---|---|
|  |  |  |  |  |  |
|  | |  |  | |  |
| | |  | | |  |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

ST IP67 Series

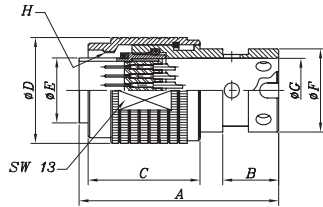
Male Plug, Female Receptacle / Adapter

■ ST-9W Plug



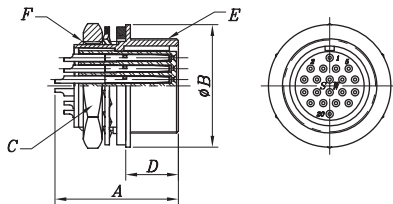
| Product Number | A | ø B | ø C | ø D | ø E | F |
|----------------|------|-----|-----|-----|------|------------|
| ST-9W-12(P) | | | | | | |
| ST-9W-16(P) | 32,3 | 8,6 | 14 | 8,5 | 10,6 | M10,5×0,5P |
| ST-9W-20(P) | | | | | | |

■ ST-9W Molding Type Plug



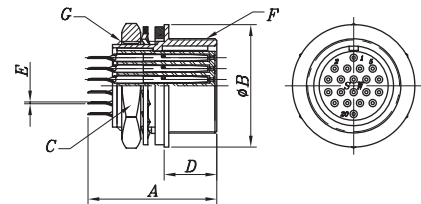
| Product Number | A | B | C | ø D | ø E | ø F | ø G | H |
|----------------|------|-----|------|-----|-----|-----|-----|------------|
| ST-9W-12(PLM) | | | | | | | | |
| ST-9W-16(PLM) | 26,4 | 7,4 | 14,8 | 14 | 8,6 | 11 | 8,5 | M10,5×0,5P |
| ST-9W-20(PLM) | | | | | | | | |

■ ST-9W Solder Type Receptacle



| Product Number | A | ø B | C | D | E | F |
|----------------|------|------|----|-----|------------|-----------|
| ST-9W-12(R) | | | | | | |
| ST-9W-16(R) | 13,6 | 13,5 | 12 | 5,9 | M10,5×0,5P | M10×0,75P |
| ST-9W-20(R) | | | | | | |

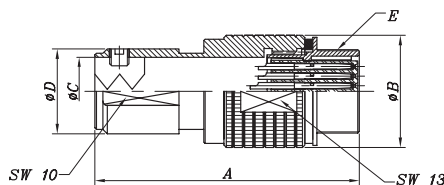
■ ST-9W PCB Type Receptacle



| Product Number | A | ø B | C | D | E | F | G |
|----------------|------|------|----|-----|-----|------------|-----------|
| ST-9W-12(RPCB) | | | | | | | |
| ST-9W-16(RPCB) | 14,1 | 13,5 | 12 | 5,9 | 0,4 | M10,5×0,5P | M10×0,75P |
| ST-9W-20(RPCB) | | | | | | | |

■ STA-9W Adapter

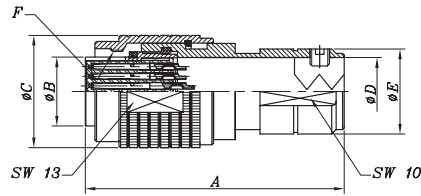
| Product Number | A | ø B | ø C | ø D | E |
|----------------|----|-----|-----|------|------------|
| STA-9W-12 | | | | | |
| STA-9W-16 | 33 | 14 | 8,5 | 10,6 | M10,5×0,5P |
| STA-9W-20 | | | | | |



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

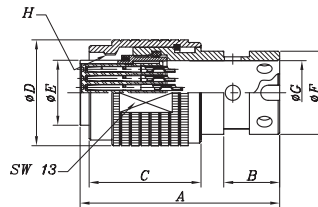
■ STH-9W Plug

| Product Number | A | ∅B | ∅C | ∅D | ∅E | F |
|----------------|------|-----|----|-----|------|------------|
| STH-9W-12(P) | | | | | | |
| STH-9W-16(P) | 32,3 | 8,6 | 14 | 8,5 | 10,6 | M10,5×0,5P |
| STH-9W-20(P) | | | | | | |

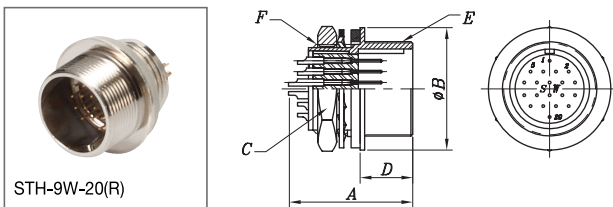


■ STH-9W Molding Type Plug

| Product Number | A | B | C | ∅D | ∅E | ∅F | ∅G | H |
|----------------|------|-----|------|----|-----|----|-----|------------|
| STH-9W-12(PLM) | | | | | | | | |
| STH-9W-16(PLM) | 26,4 | 7,4 | 14,8 | 14 | 8,6 | 11 | 8,5 | M10,5×0,5P |
| STH-9W-20(PLM) | | | | | | | | |

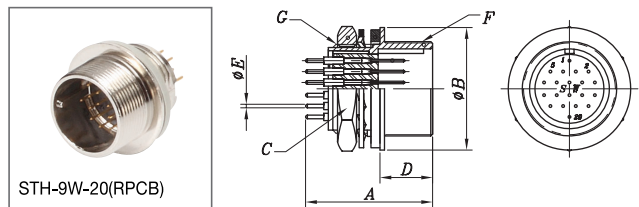


■ STH-9W Solder Type Receptacle



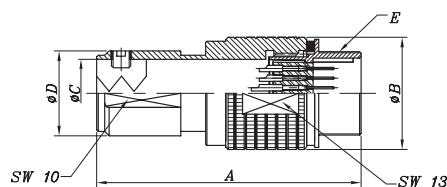
| Product Number | A | ∅B | C | D | E | F |
|----------------|------|------|----|-----|------------|-----------|
| STH-9W-12(R) | | | | | | |
| STH-9W-16(R) | 13,6 | 13,5 | 12 | 5,9 | M10,5×0,5P | M10×0,75P |
| STH-9W-20(R) | | | | | | |

■ STH-9W PCB Type Receptacle



| Product Number | A | ∅B | C | D | E | F | G |
|-----------------|------|------|----|-----|-----|------------|-----------|
| STH-9W-12(RPCB) | | | | | | | |
| STH-9W-16(RPCB) | 14,1 | 13,5 | 12 | 5,9 | 0,4 | M10,5×0,5P | M10×0,75P |
| STH-9W-20(RPCB) | | | | | | | |

■ STHA-9W Adapter



| Product Number | A | ∅B | ∅C | ∅D | E |
|----------------|----|----|-----|------|------------|
| STHA-9W-12 | | | | | |
| STHA-9W-16 | 33 | 14 | 8,5 | 10,6 | M10,5×0,5P |
| STHA-9W-20 | | | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

General Instruction / Information

- Diagram 1 shows a sample wiring for ST series.
- Soldering must be done quickly and carefully to prevent damage to insulator.
- Receptacles do not require additional instructions.
- Specification of Nut

| Size | Nut Specification | Nut tightening force |
|---------|-------------------|----------------------|
| ST - 9W | M10×0,75P | 20~23(kgf · cm) |

Wiring Sequence

- ① Select cable according to outer diameter and cross section, lower than 0,08mm²(AWG#28).
- ② Insert Plug Housing to cable.
- ③ Strip cable per dimension given and loosen braid.
- ④ Secure Plug Body to jig for soldering.
- ⑤ Solder stripped cable to pin.
- ⑥ Fasten Crimp using hand crimp tool(SA-HCT^①).
- ⑦ Lock Plug Housing and Plug Body using tightening force displayed on Table 1.
- ⑧ Tighten Wrench Bolt using 0,3N force onto one of two embossed parts of crimp.
- ⑨ Plug Housing must be over molded in order to achieve IP67 rating.

^① See below for information on SA-HCT.

Diagram 1

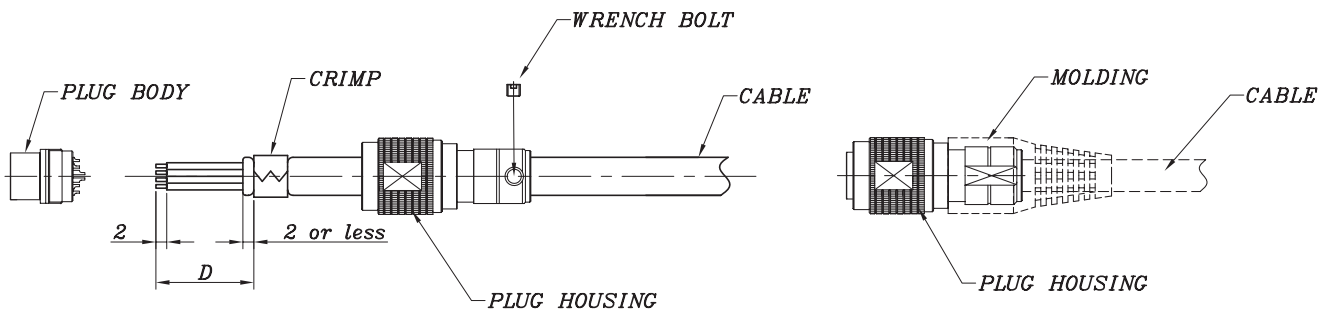


Table 1

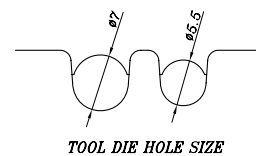
unit : mm

| Size | Spanner Jaw | D (Dimension) | Tightening Force | Notes |
|-------|-------------|---------------|-----------------------|------------------------|
| ST-9W | 10 | 15 | 1,0N · m (10kgf · cm) | SA-HCT size ϕ 7,0 |

SA-HCT (Hand Crimp Tool)

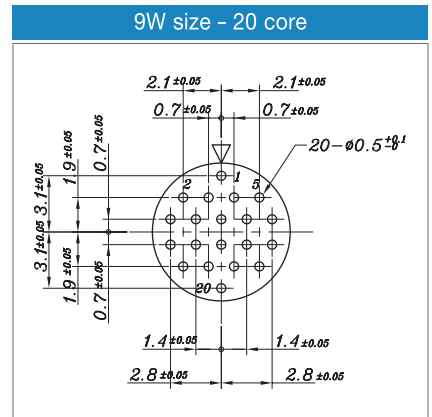
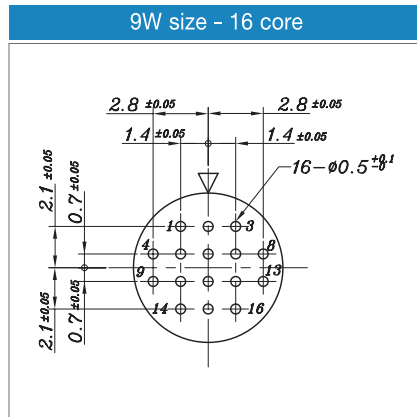
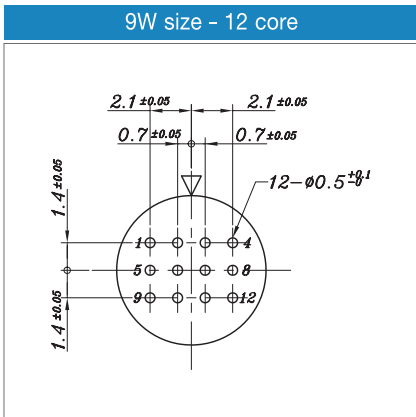


Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.

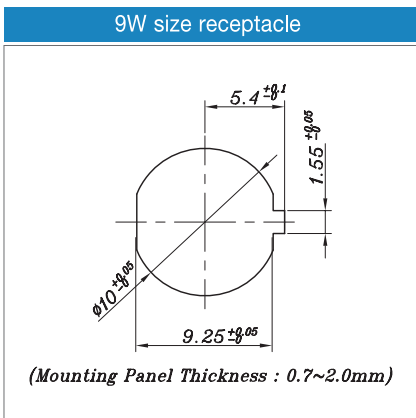


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Receptacle PCB Hole Layout



■ Receptacle Panel Layout





Features

- Super-miniature size with multiple contact
- Safe insert system preventing pin damage
- Protection rating of IP67 with over molding
- Standard and Custom Design

Applications

- Professional A/V
- Measuring equipment
- Sensors
- Wireless radio
- Medical

Part Numbering



Drawing Number
Optional Suffix (Omissible)
 1,2,3
 To indicate modification of original
Cable Length : 3 Digits
 Unit Plug : m
 Recep : cm
 Ex) Using 3m Cable for Plug : 003
 Using 30cm Cable for Recep : 030

Plug Cable Assembly



| Type | Construction |
|------|---|
| A | ST IP67 Connector + Cable + Housing |
| B | ST IP67 Connector + Cable + ST IP67 Connector |

※ Design and Customization Service Available

Receptacle Cable Assembly



| Type | Construction |
|------|--|
| A | ST IP67 Connector + wire + open end |
| B | ST IP67 Connector + wire + Housing |
| C | ST IP67 Connector + wire + Housing with core |

※ Design and Customization Service Available

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



SU Series Part Numbering



Features

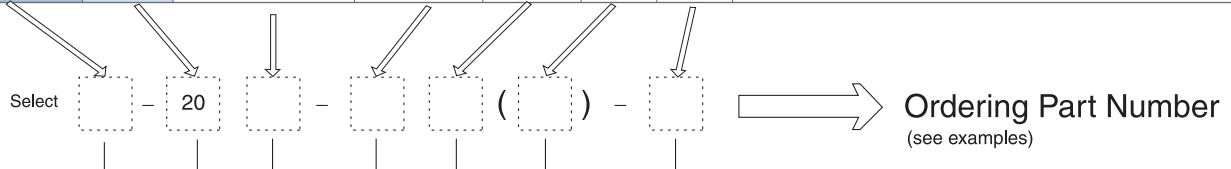
- Safe connection / Easy mounting
- Antenna Interface Standards Group(AISG) Specification
- Electromagnetic Protection
- Protection rating of IP67
- UL Recognized 
- IEC 61076-2-106 and AISG Specification

Applications

- Electronic Precision Equipment
- Control Engineering
- Automation
- Medical

Part Numbering

| Series | Size | Body Type | No. of Contacts | Contact Type | Option | | Notes |
|--------|------|-----------|-----------------------|--------------|--------|---|---------------------|
| | | | | | PCB | Potting | |
| SU | 20 | SP | 3,4,5,6 8,A5,12,14 | P | | | Plug (Male Contact) |
| | | P | | | | Plug (Female Contact) | |
| | | SBR | | ● | | Receptacle (Female Contact) | |
| | | SBR1 | | ● | ● | Receptacle (Female Contact) | |
| | | BR | | ● | ● | Receptacle (Male Contact) | |
| | | SRB | | ● | ● | Receptacle (Female Contact, Rear mount) | |
| | | SPR | | ● | ● | Receptacle (Female Contact, Flange type) | |
| | | SPR2 | | | | | |
| | | SPR5 | | | | | |
| | | PR | | ● | ● | Receptacle (Male Contact, Flange type) | |
| | | PR3 | | | | | |
| | | PR6 | | ● | ● | Receptacle (Male Contact, Long Flange type) | |



Ordering Part Number
(see examples)









| | |
|---------------------------------------|---|
| Connector Series | SU 20 Series(IP67 type) |
| Body Type | SP : Plug P : Plug SBR : Receptacle SBR1 : Receptacle BR : Receptacle SRB : Receptacle, Rear mount SPR : Receptacle, Flange type SPR2 : Receptacle, Flange type SPR5 : Receptacle, Flange type PR : Receptacle, Flange type PR3 : Receptacle, Long Flange type PR6 : Receptacle, Long Flange type BRC : Receptacle cap (accessory) SBRC : Receptacle cap (accessory) |
| No. of Contacts | 3,4,5,6,8,A5,12,14 |
| Contact Type | P : Male S : Female None : Receptacle cap |
| Contact Option(for receptacle) | PCB : PCB contact termination |
| Potting Option | 1 : Silicon 2 : Epoxy |

Examples

- SU - 20SP - 3P
SU series - Size 20 Plug - 3 Male Contact
- SU - 20P - 8S
SU series - Size 20 Plug - 8 Female Contact
- SU - 20SBR - 12S
SU series - Size 20 Receptacle - 12 Female Contact
- SU - 20BR - 8P (PCB)
SU series - Size 20 Receptacle - 8 PCB termination Contact

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Major Performance / Contact Arrangements

| Size / No. of Contacts Performance | Standard | Size 20 | | | | | | | |
|---------------------------------------|--------------------|---|---|---|--|---|---|---|---|
| | | 3 | 4 | 5 | 6 | 8 | A5 | 12 | 14 |
| Contact Arrangement | |  |  |  |  |  |  |  |  |
| | IEC 61076-2-106 | ○ | ○ | ○ | ○ | ○ | | ○ | ○ |
| | IEC 60130-9 | ○ | ○ | | ○ | ○ | | | |
| Rated Voltage | IEC 60664-1 | 300V | | 300V | | 100V | | 150V | |
| | IEC 61076-2-106 | 100V | | 63V | | 32V | | 32V | |
| | UL 1977 | 60V | | | | | | | |
| Rated Current(40℃) | IEC 60512-5-2 | 5A | | | | | | 3A | |
| Rated Impulse Withstand Voltage | IEC 61076-2-106 | 840V | | | | 500V | | | |
| | IEC 60664-1 | 1500V | | | | 500V | | 1200V | |
| Insulation Resistance | IEC 60512, Test 3a | ≥10 ⁸ Ω | | | | | | | |
| Contact Resistance | IEC 60512, Test 2a | ≤5m Ω | | | | | | | |
| Wire Gauge(Maximum) | | 0,75mm ² (AWG 20) | | | | | | 0,25mm ² (AWG 24) | |
| Cable Diameter | | ∅ 4 ~ ∅ 8 | | | | | | | |
| Temperature Range | | - 40℃ ~ +85℃ | | | | | | | |
| IP Protection Rating | | IP67 / IP68 | | | | | | | |

■ Material Used / Finish

| | | Material | Finish |
|-----------|--------|----------------------------|--------------|
| Body | | Zinc Alloy, Brass Aluminum | Ni Plating |
| Insulator | | PA | Black |
| Contacts | Male | Brass | Gold Plating |
| | Female | Phosphor bronze | Gold Plating |

SU Series Mini-map

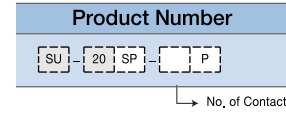
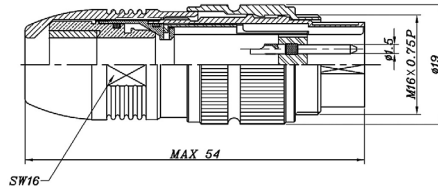


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

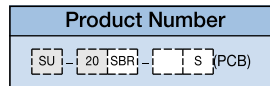
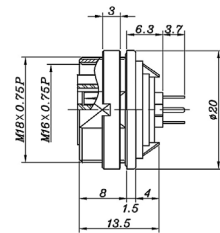
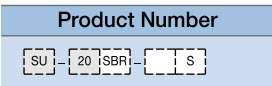
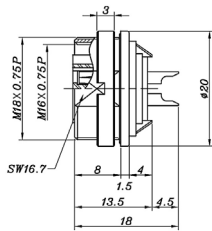


SU Series Plug, Receptacle(Solder / PCB type)

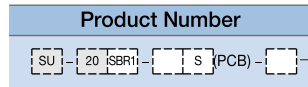
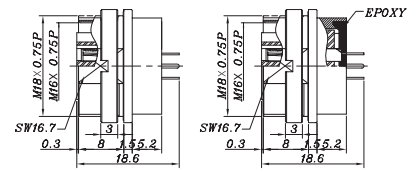
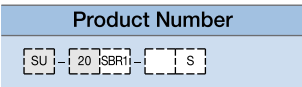
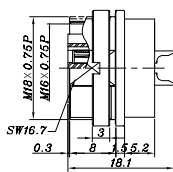
■ SU-20SP Series



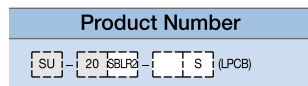
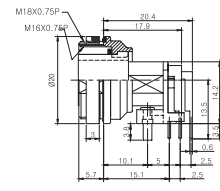
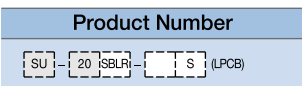
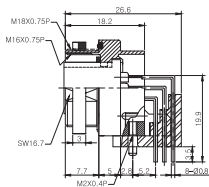
■ SU-20SBR Series | Bulkhead



■ SU-20SBR1 Series | Bulkhead, Potting

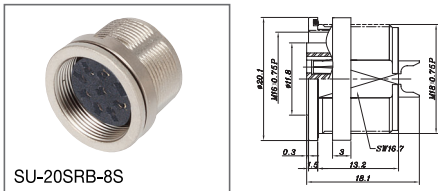


■ SU-20SBLR Series | Bulkhead, Right Angle PCB Type



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SU-20SRB Series | Rear mount



SU-20SRB-8S

Product Number

SU - 20 SRB - S

No. of Contact : 3,4,5,6,8,12,14

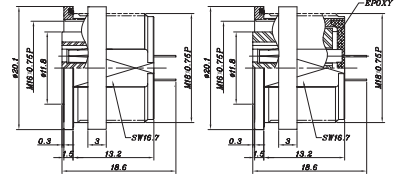


SU-20SRB-8S(PCB)

Product Number

SU - 20 SRB - S (PCB) -

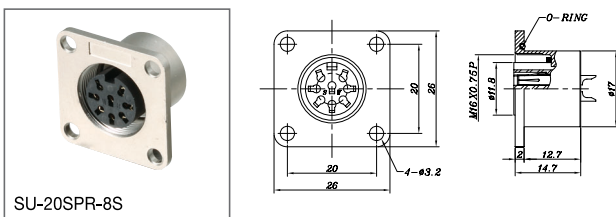
No. of Contact : 3,4,5,6,8,12,14



With Epoxy

Potting option
1, Silicon 2, Epoxy

■ SU-20SPR Series | Flange, Potting

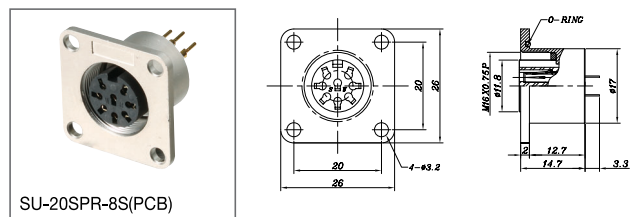


SU-20SPR-8S

Product Number

SU - 20 SPR - S

No. of Contact : 3,4,5,6,8,12,14

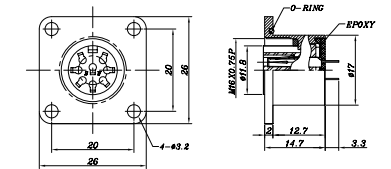


SU-20SPR-8S(PCB)

Product Number

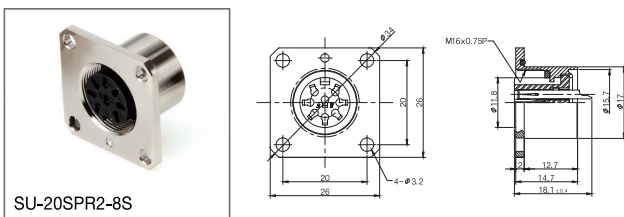
SU - 20 SPR - S (PCB) -

No. of Contact : 3,4,5,6,8,12,14



With Epoxy

Potting option
1, Silicon 2, Epoxy

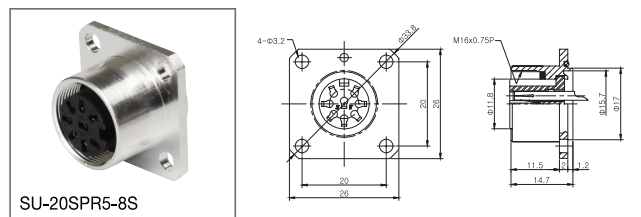


SU-20SPR2-8S

Product Number

SU - 20 SPR2 - S

No. of Contact : 3,4,5,6,8,12,14



SU-20SPR5-8S

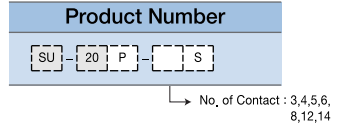
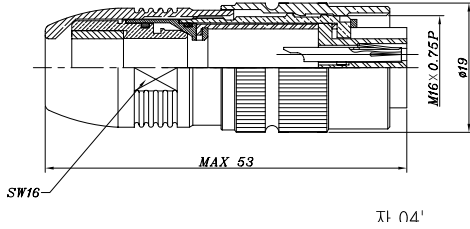
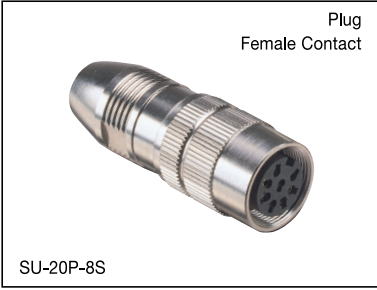
Product Number

SU - 20 SPR5 - S

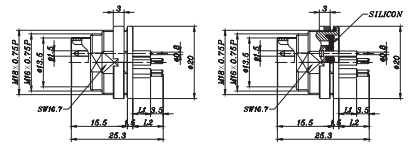
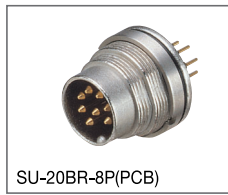
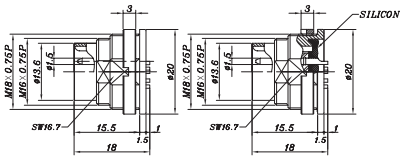
No. of Contact : 3,4,5,6,8,12,14

SU Series Plug, Receptacle(Solder / PCB type)

■ SU-20P Series

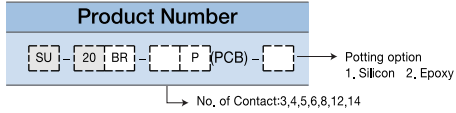
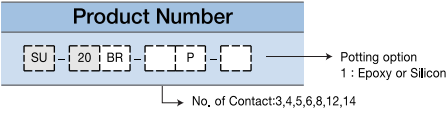


■ SU-20BR Series | Bulkhead, Potting

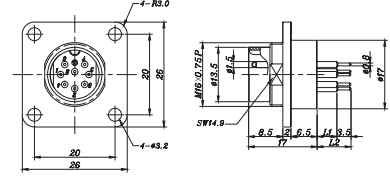
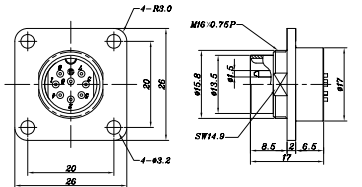


L1 and L2 customizable upon request.

| L ₁ | L ₂ |
|----------------|----------------|
| 4,8 | 8,4 |

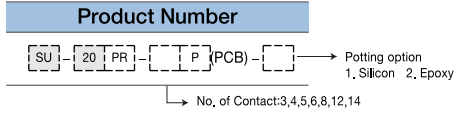
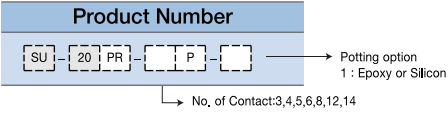


■ SU-20PR Series | Flange, Potting



L1 and L2 customizable upon request.

| L ₁ | L ₂ |
|----------------|----------------|
| 4,8 | 8,4 |

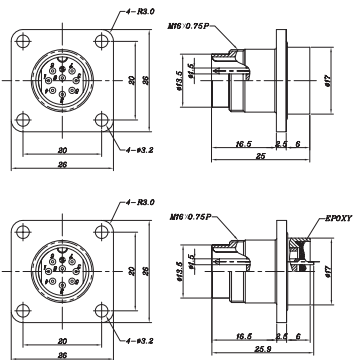


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

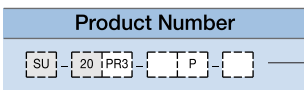
■ SU-20PR3 Series | Flange, Potting



SU-20PR3-8P



With Epoxy

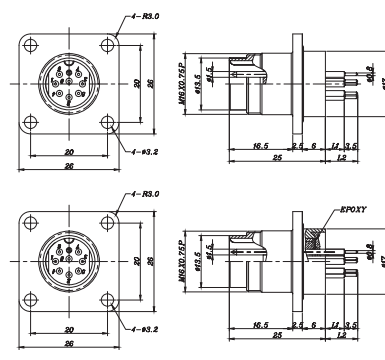


Potting option
1, Silicon 2, Epoxy

↳ No. of Contact: 3,4,5,6,8,12,14



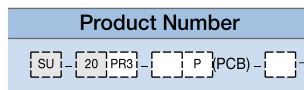
SU-20PR3-8P(PCB)



L1 and L2 customizable upon request.

| L ₁ | L ₂ |
|----------------|----------------|
| 4,8 | 8,4 |

With Epoxy



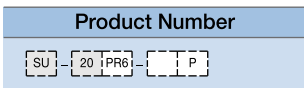
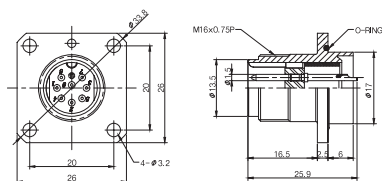
Potting option
1, Silicon 2, Epoxy

↳ No. of Contact: 3,4,5,6,8,12,14

■ SU-20PR6 Series



SU-20PR6-8P



↳ No. of Contact: 3,4,5,6,8,12,14

SU Series Cable Assembly for Plug



Features

- AISG 1,1/2,0 Protocol
- Protection rating of IP 67/IP68
- Available in UL 20549
- Female to Female, Male to Male, Female to Male
- Available in 1m to 100 m
- RoHS Compliant
- PVC Free
- IEC 61076-2-106 and AISG Specification

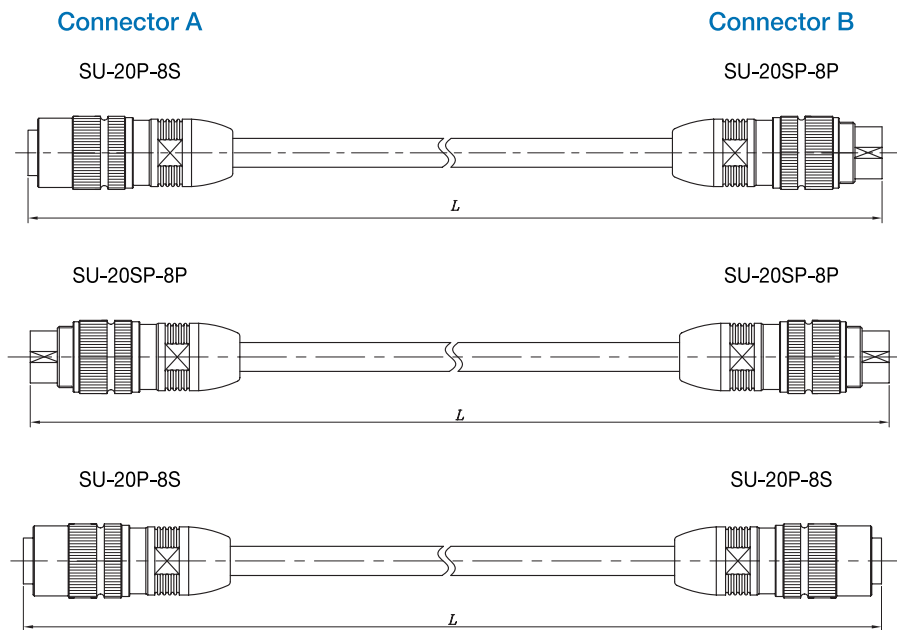
Applications

- Telecommunication
- RET Control Cable
- Adapter Cable
- General Industrial

■ Plug Cable Assembly

| Connector A | | Connector B | | Cable Length, L(m) | Product Number |
|-------------|----------------|-------------|----------------|--------------------|-----------------|
| SU-20SP-8P | Male contact | SU-20P-8S | Female contact | 1m ~ 100m | SW - 4509 - *** |
| SU-20SP-8P | Male contact | SU-20SP-8P | Male contact | 1m ~ 100m | SW - 4510 - *** |
| SU-20P-8S | Female contact | SU-20P-8S | Female contact | 1m ~ 100m | SW - 4994 - *** |

* The last three digits of product number indicates cable length, Cable length can be customized,



Specifications subject to change without notice, Consult Sam Woo Electronics for the latest specifications.



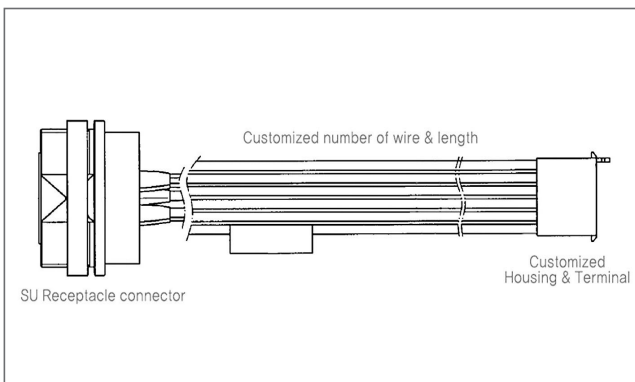
Features

- IP 67/IP68 with Epoxy
- UL1569, UL1015, UL 1431
- Plastic/Metal Caps Available

Applications

- CCU (Central Control Unit)
- RCU (Remote Control Unit)
- Junction Box
- Lightning Protection Unit
- Actuator

■ Part Numbering



Drawing Number
Optional Suffix (Omissible)
 1,2,3
 To indicate modification of original
Cable Length : 3 Digits
 Unit Plug : m
 Recep : cm
 Ex) Using 3m Cable for Plug : 003
 Using 30cm Cable for Recep : 030

■ Cable Assembly for Receptacle



Female Contact Receptacle Cable Assembly

| Type | Construction |
|------|---|
| A | Female Contact Receptacle + Wire + Housing & Terminal |
| B | Female Contact Flange Receptacle + Wire + Housing & Terminal |
| C | Female Contact Flange Receptacle + Wire(Short) + Housing & Terminal |

※ Design and Customization Service Available



Male Contact Receptacle Cable Assembly

| Type | Construction |
|------|---|
| D | Male Contact Receptacle + Wire + Housing & Terminal |
| E | Male Contact Receptacle + Wire (Short) + Housing & Terminal |

※ Design and Customization Service Available

■ Protecting Caps for SU series

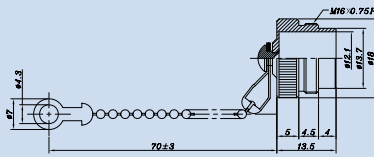


SU Female Contact type Receptacle



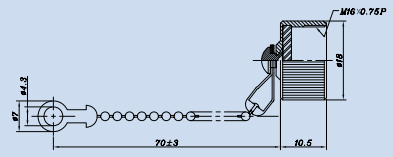
SU Male Contact type Receptacle

SU-20SBRC, SU-20SBRC1



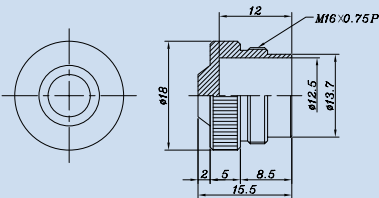
- SU-20SBRC : 70mm
- SU-20SBRC1 : Long chain type (120mm)

SU-20BRC, SU-20BRC1

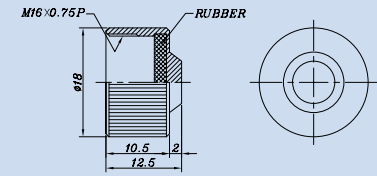


- SU-20BRC : 70mm
- SU-20BRC1 : Long chain type (120mm)

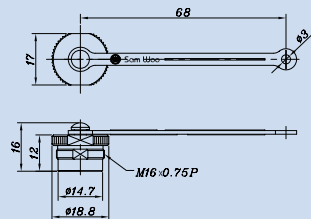
SU-20SBRC2



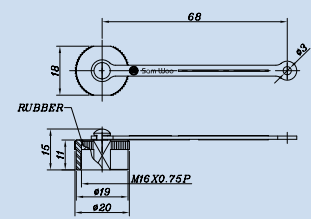
SU-20BRC2



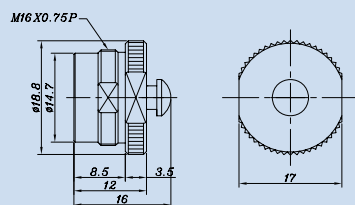
SU-20SBRC4



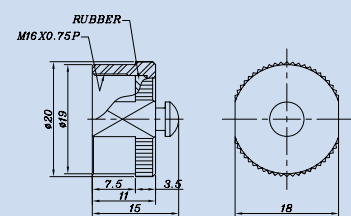
SU-20BRC4



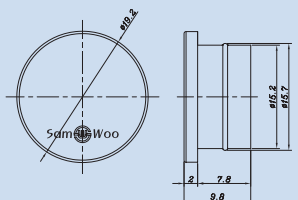
SU-20SBRC5



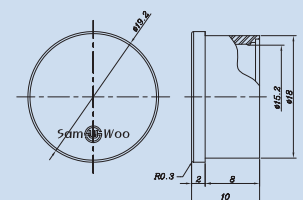
SU-20BRC5



SU-20SBR-DUST CAP

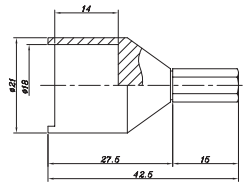
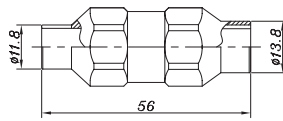
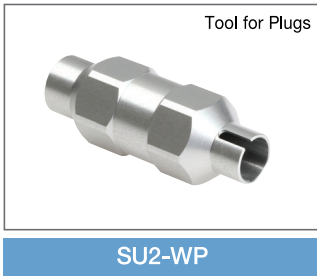
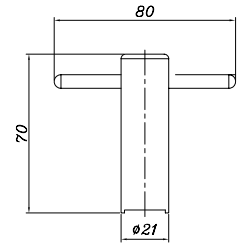
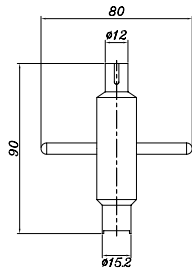


SU-20BR-DUST CAP

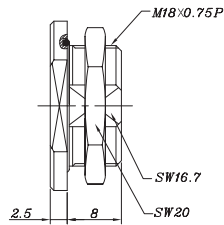
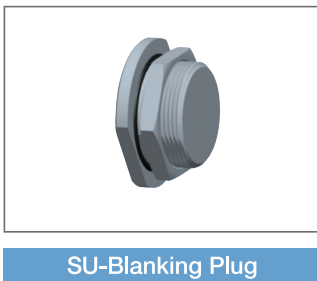


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

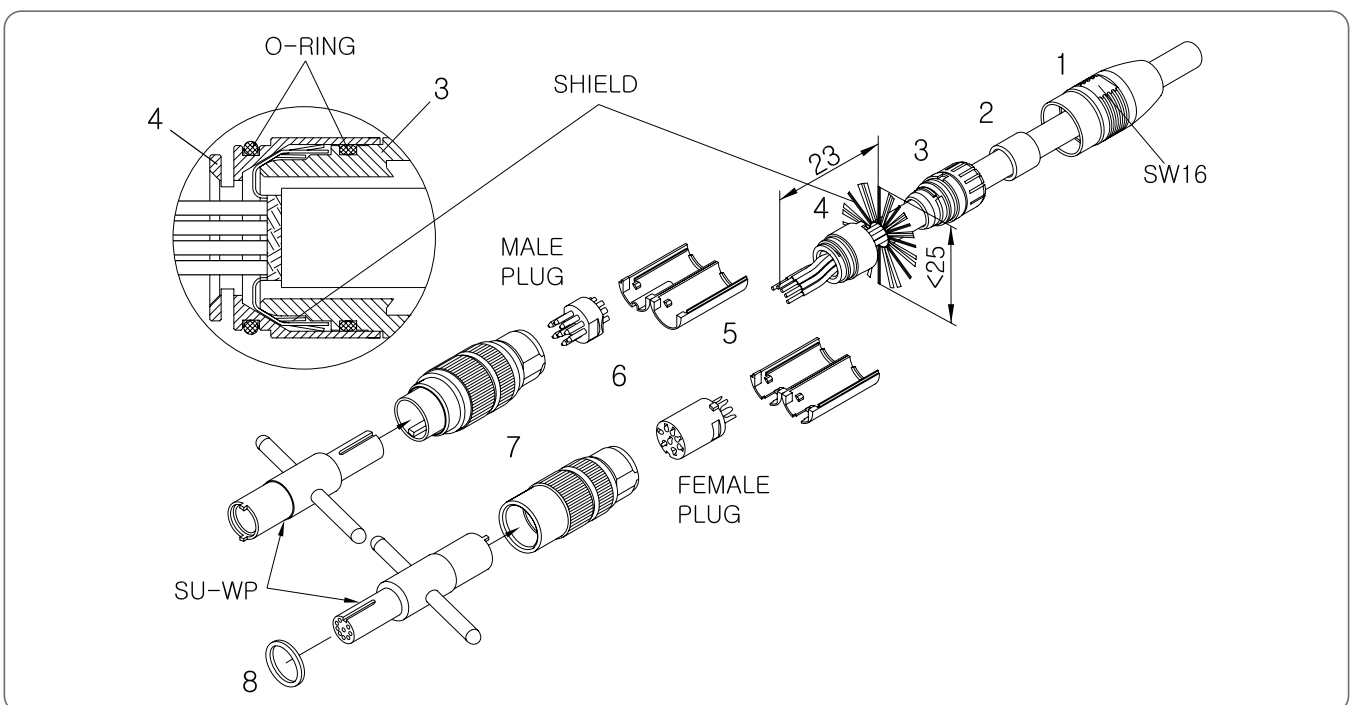
■ Tool for SU series



■ Below should go under Accessories



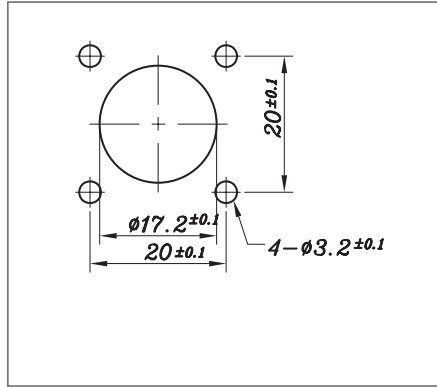
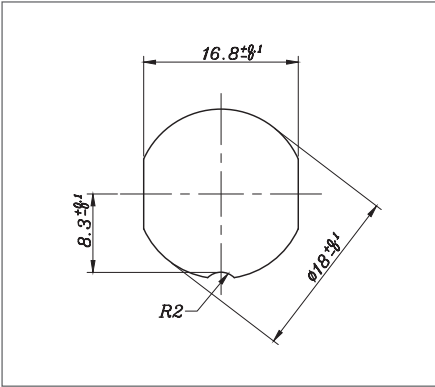
■ SU Cable Assembly Instruction



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

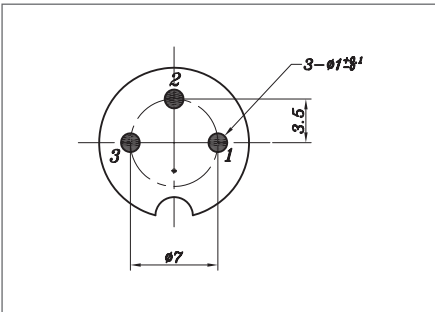
SU Series

■ Panel Layout

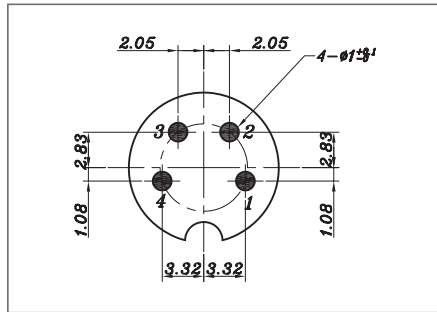


■ PCB Layout

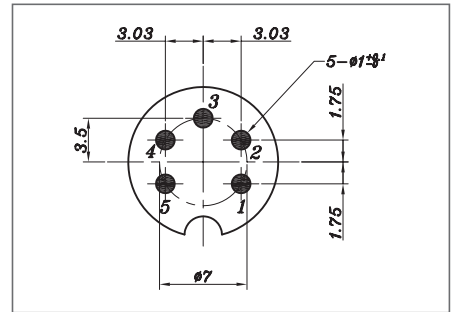
20 Size - 3 Core



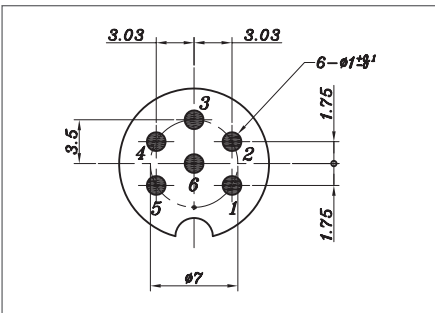
20 Size - 4 Core



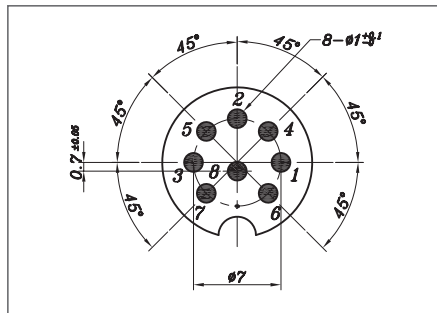
20 Size - 5 Core



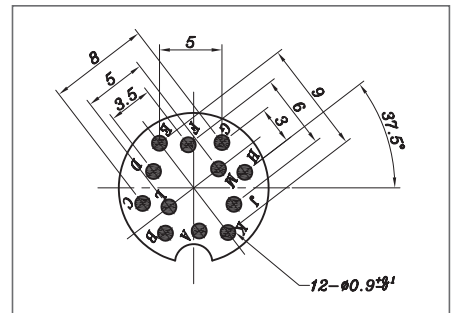
20 Size - 6 Core



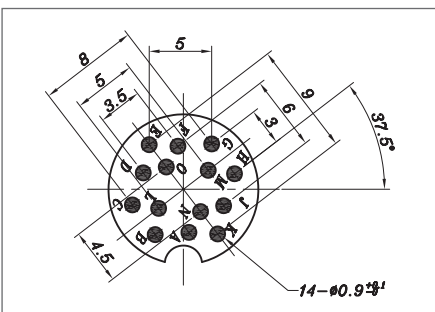
20 Size - 8 Core



20 Size - 12 Core



20 Size - 14 Core



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



SU2 / SU3 Series Part Numbering



Features

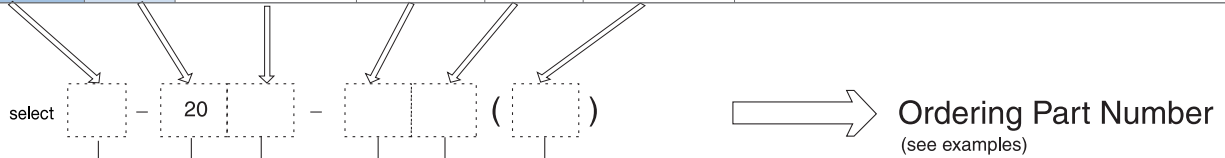
- AISG 1,1/2,0 Protocol Standard
- Protection rating of IP67
- IEC 61076-2-106 and AISG Specification
- RoHS Compliant   • UL Recognized
- Cost Effective
- Safe Connection / Easy Mounting

Applications

- Telecommunication
- Smart Bias Tee
- Lightning Protection Unit
- RCU (Remote Control Unit)
- General Industrial
- CCU (Central Control Unit)
- Junction Box
- RET Control Cable
- Power Signal Splitter

Part Numbering

| Series | Size | Body Type | No. of Contacts | Contact Type | Cable Option | Notes |
|--------|------|-----------|-----------------|--------------|-----------------|-----------------------|
| SU2 | 20 | SP | 3,4,5,6 | P | 6,0 / 8,0 / 9,0 | Plug (Male Contact) |
| SU3 | | P | 8,12,14 | S | / M | Plug (Female Contact) |



Connector Series
 SU2 20 Series(IP67 type)
 SU3 20 Series(IP67 type, Hexagonal Body)

Body Type
 SP : Plug
 P : Plug

No. of Contacts
 3,4,5,6,8,A5,12,14

Contact Type
 P : Male
 S : Female

Cable Option (Applicable Cable Size)
 6,0 : \varnothing 4,1mm~ \varnothing 6,0mm
 8,0 : \varnothing 6,1mm~ \varnothing 8,0mm
 9,0 : \varnothing 8,1mm~ \varnothing 9,0mm
 M : Molding Type (Max \varnothing 8mm)

Examples

- SU2 - 20SP - 5P - 6,0
 SU2 Series - Size 20 Plug - 5 Male Contact - Cable Option 6,0
- SU2 - 20P - 8S - 8,0
 SU2 Series - Size 20 Plug - 8 Female Contact - Cable Option 8,0
- SU3 - 20SP - 8P - 9,0
 SU3 Series - Size 20 Plug - 8 Male Contact - Cable Option 9,0

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Major Performance / Contact Arrangements

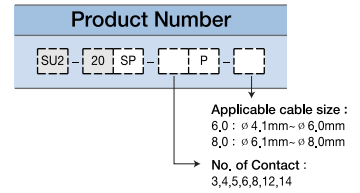
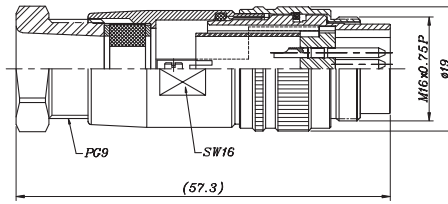
| Performance | Standard | Size 20 | | | | | | | |
|---------------------------------|--------------------|------------------------------|---|------|---|------|----|------------------------------|----|
| | | 3 | 4 | 5 | 6 | 8 | A5 | 12 | 14 |
| Contact Arrangement | | | | | | | | | |
| | IEC 61076-2-106 | ○ | ○ | ○ | ○ | ○ | | ○ | ○ |
| | IEC 60130-9 | ○ | ○ | | ○ | ○ | | | |
| Rated Voltage | IEC 60664-1 | 300V | | 300V | | 100V | | 150V | |
| | IEC 61076-2-106 | 100V | | 63V | | 32V | | 32V | |
| | UL 1977 | 60V | | | | | | | |
| Rated Current(40℃) | IEC 60512-5-2 | 5A | | | | | | 3A | |
| Rated Impulse Withstand Voltage | IEC 61076-2-106 | 840V | | | | 500V | | | |
| | IEC 60664-1 | 1500V | | | | 500V | | 1200V | |
| Insulation Resistance | IEC 60512, Test 3a | ≥10 ⁸ Ω | | | | | | | |
| Contact Resistance | IEC 60512, Test 2a | ≤5m Ω | | | | | | | |
| Wire Gauge(Maximum) | | 0,75mm ² (AWG 20) | | | | | | 0,25mm ² (AWG 24) | |
| Cable Diameter | | ∅ 4 ~ ∅ 9 | | | | | | | |
| Temperature Range | | - 40℃ ~ +85℃ | | | | | | | |
| IP Protection Rating | | IP67 / IP68 | | | | | | | |

■ Material Used / Finish

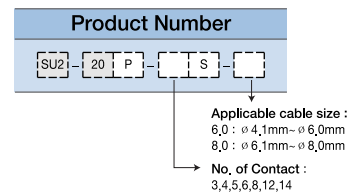
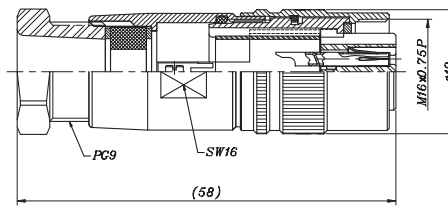
| | | Material | Finish |
|-----------|--------|-------------------|--------------|
| Body | | Zinc Alloy, Brass | Ni Plating |
| Insulator | | PA | Black |
| Contacts | Male | Brass | Gold Plating |
| | Female | Phosphor Bronze | Gold Plating |

SU2 / SU3 Series Plug(Male/ Female Contact)

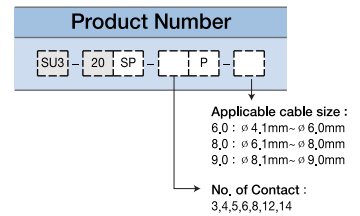
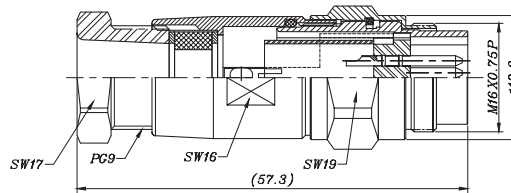
■ SU2-20SP Series



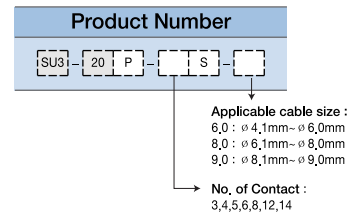
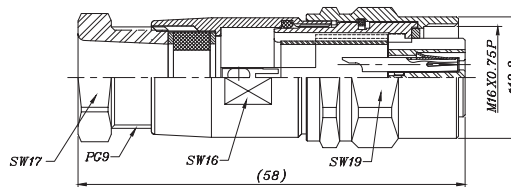
■ SU2-20P Series



■ SU3-20SP Series



■ SU3-20P Series



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



Features

- AISG 1,1/2,0 Protocol
- DIN 45326 Standard
- Available in UL20549
- Female to Female, Male to Male, Female to Male
- Available in 1m to 100m
- RoHS Compliant
- IP 67/IP 68 Protection
- PVC Free

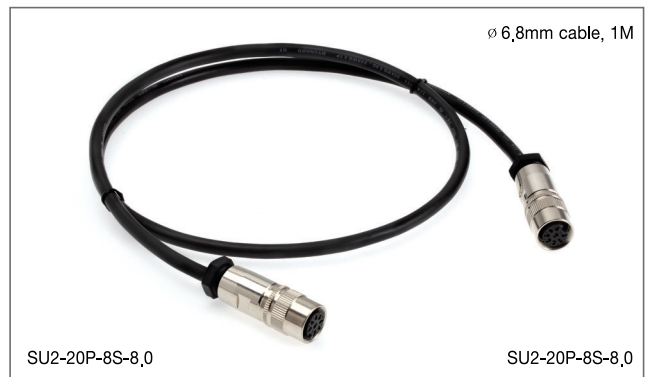
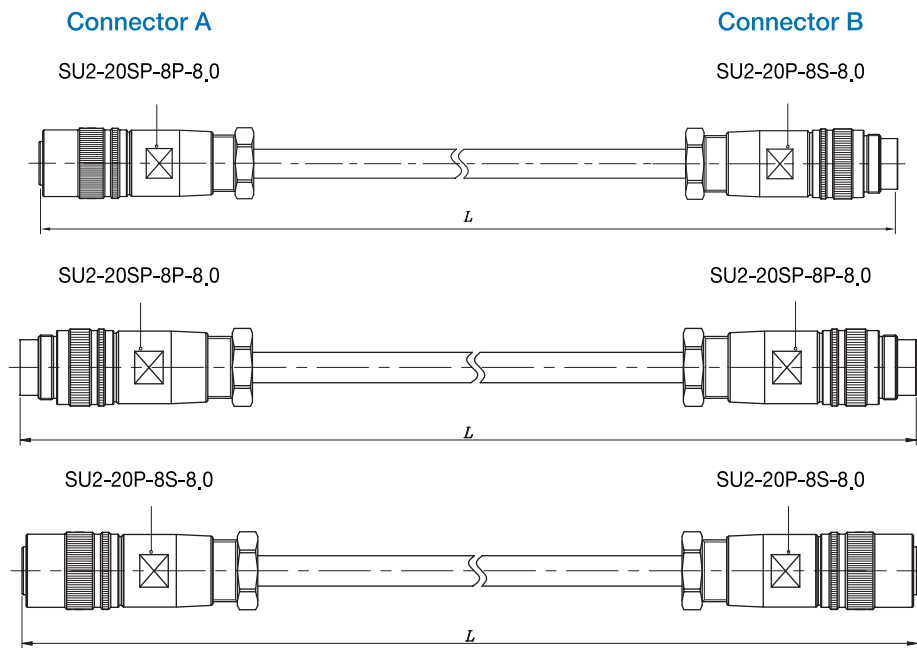
Applications

- Telecommunications
- RET Control Cable
- Adapter Cable
- General Industrial

■ **Part Numbering**

| Connector A | | Connector B | | Cable Length, L(m) | Product Number |
|-----------------|----------------|-----------------|----------------|--------------------|-----------------|
| SU2-20SP-8P-8,0 | Male contact | SU2-20P-8S-8,0 | Female contact | 1m ~ 100m | SW - 5266 - *** |
| SU2-20SP-8P-8,0 | Male contact | SU2-20SP-8P-8,0 | Male contact | 1m ~ 100m | SW - 5505 - *** |
| SU2-20P-8S-8,0 | Female contact | SU2-20P-8S-8,0 | Female contact | 1m ~ 100m | SW - 5506 - *** |

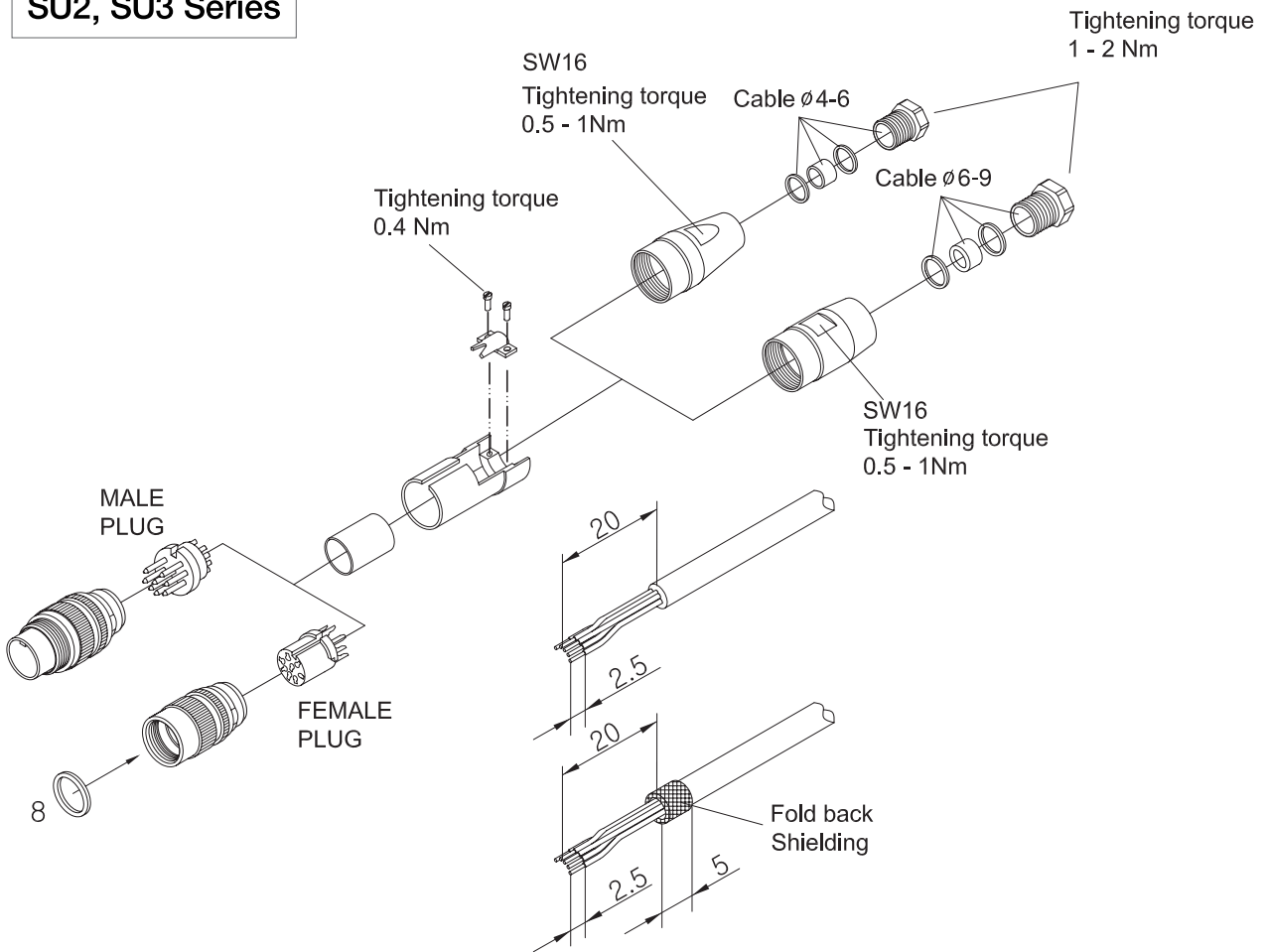
* The last three digits of product number indicates cable length, Cable length can be customized,



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SU2, SU3 Cable Assembly Instruction

SU2, SU3 Series



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



SW Series Part Numbering



Features

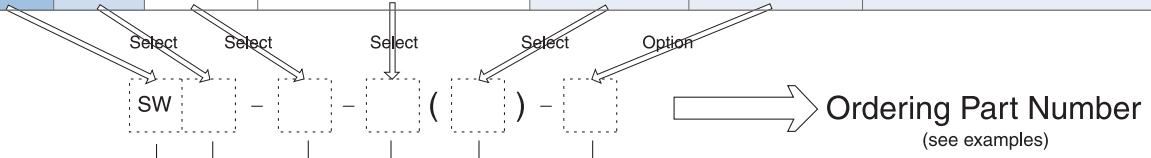
- Excellent performance at low cost
- Screw mounting assures solid connection
- Manufactured with precision

Applications

- Professional audio and video
- CCTV system
- Vision related testing equipment
- Portable wireless radio
- Measuring equipment
- Computers and peripherals
- Medical, and much more.

Part Numbering

| Product Number | | Size | Number of Contacts | Suffix | Optional Suffix | Notes |
|----------------|--------|---------|---|----------|---------------------------------------|--|
| Series | Prefix | | | | S | |
| SW | H | 8 or 10 | 8 size : 4,5,6 10 size : 2,3,4,9,10,12 | P | • | Main SW Series |
| | | | | R / RPCB | • | |
| | | | | A | • | SWH Series (SW with reverse contacts) |
| | | | | HA | • | |
| | A | | | • | SWA Series (Adapter for SW series) | |
| | | | | HA | • | SWHA Series (Adapter for SWH series) |



Examples

- SW - 8 - 4 (P)
SW series - Size 8 Plug - 4 Male Contact (Plug shell)
- SW - 10 - 12 (R) - S
SW series - Size 10 Receptacle - 12 Female Contact - Silver Plating Contact
- SWA - 10 - 2
SW series - Size 10 Adapter - 2 Female Contact
- SWHA - 8 - 6 - S
SWH series - Size 8 Adapter - 6 Male Contacts - Silver Plating Contact

Connector Series
 SW
 SWH - reverse contact
 SWA - adapter for SN series
 SWHA - adapter for SNH series

Size
 8,10

No. of Contacts
 8 Size : 4,5,6
 10 Size : 2,3,4,9,10,12

Body Type
 P : Plug
 R : Receptacle (solder termination)
 RPCB : Receptacle (PCB termination)
 blank : Adapter

Optional
 S : Silver Plating Contact

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

Major Performances / Contact Arrangements

| Performance | Size / No. of Contacts | | Size 8 | | | |
|--|------------------------|----------|----------|----------|----------|----------|
| | 4 | 5 | 5 | 5 | 6 | 6 |
| Withstanding Voltage (per min) ¹ | AC 300V | AC 300V | AC 300V | AC 300V | AC 300V | AC 300V |
| Current | 2A | 2A | 2A | 2A | 2A | 2A |
| Insulation Resistance (Minimum) ² | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω |
| Contact Resistance (Maximum) ³ | 10m Ω | 10m Ω | 10m Ω | 10m Ω | 10m Ω | 10m Ω |
| Solder Pot Inside Diameter | ∅ 0,7 | ∅ 0,7 | ∅ 0,7 | ∅ 0,7 | ∅ 0,7 | ∅ 0,7 |
| Wire Gauge(Maximum) | AWG26 | AWG26 | AWG26 | AWG26 | AWG26 | AWG26 |
| Contact Arrangement | | | | | | |

| Performance | Size / No. of Contacts | | Size 10 | | | |
|--|------------------------|----------|----------|----------|----------|----------|
| | 2 | 3 | 4 | 9 | 10 | 12 |
| Withstanding Voltage (per min) ¹ | AC 500V | AC 500V | AC 500V | AC 300V | AC 300V | AC 300V |
| Current | 3A | 3A | 3A | 2A | 2A | 2A |
| Insulation Resistance (Minimum) ² | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω |
| Contact Resistance (Maximum) ³ | 10m Ω | 10m Ω | 10m Ω | 10m Ω | 10m Ω | 10m Ω |
| Solder Pot Inside Diameter | ∅ 1,0 | ∅ 1,0 | ∅ 1,0 | ∅ 0,7 | ∅ 0,7 | ∅ 0,7 |
| Wire Gauge(Maximum) | AWG20 | AWG20 | AWG20 | AWG26 | AWG26 | AWG26 |
| Contact Arrangement | | | | | | |

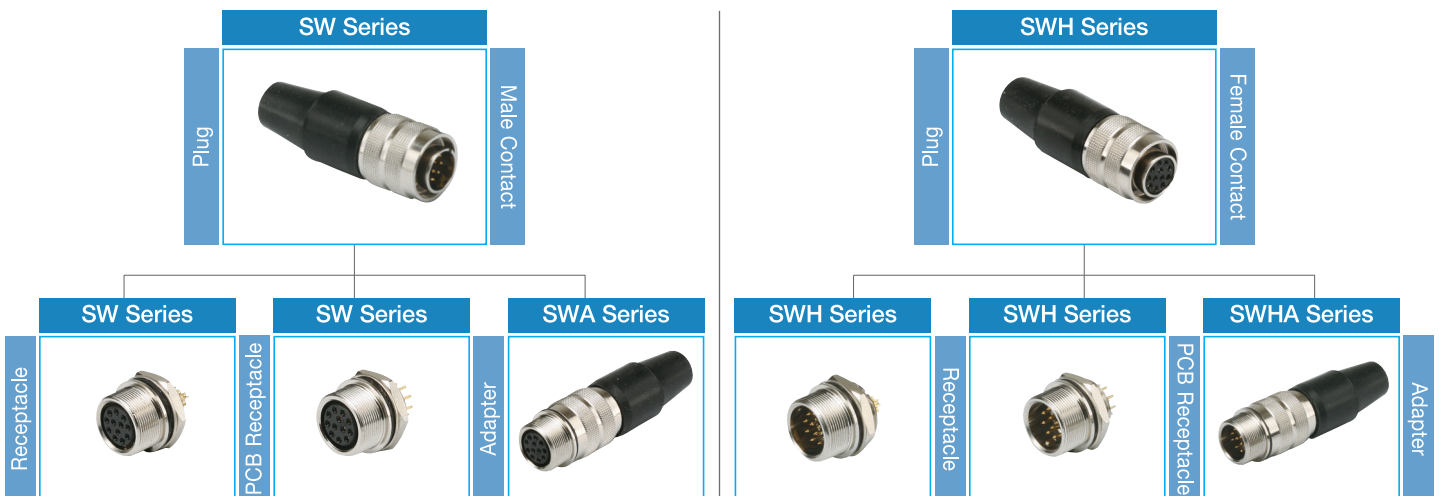
Contact Diameter
∅ 0,55mm ∅ 1,0mm

¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
 • Specifications subject to change without notice.
 • Consult Sam Woo Electronics for the latest specifications.
⁴ Connector contact arrangement is from mating surface.

Material Used / Finish

| | Material | Finish |
|-----------|----------|-----------------|
| Body | Brass | Ni Plating |
| Insulator | PA | Black |
| Contacts | Male | Brass |
| | Female | Phosphor bronze |
| | | Gold Plating |

SW Series Mini-map

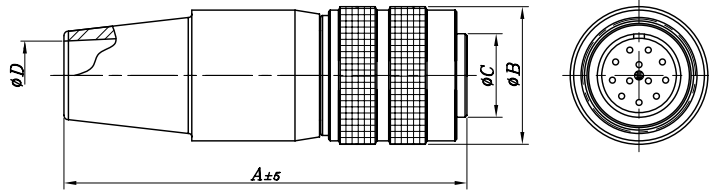


SW Series

SW Male Plug, Female Receptacle / Adapter



SW Plug



| Product Number | A | Ø B | Ø C | Ø D |
|----------------|----|-----|-----|-----|
| SW-8-4 (P) | 35 | 11 | 6,7 | 5,1 |
| SW-8-5 (P) | | | | |
| SW-8-6 (P) | | | | |

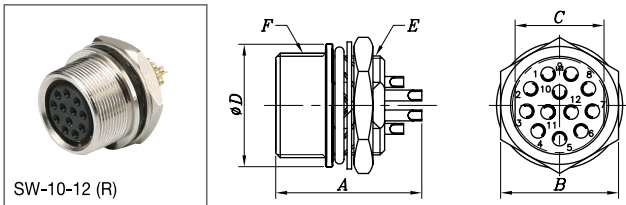
| Product Number | A | Ø B | Ø C | Ø D |
|----------------|----|-----|-----|-----|
| SW-10- 2 (P) | 42 | 14 | 8,5 | 7 |
| SW-10- 3 (P) | | | | |
| SW-10- 4 (P) | | | | |
| SW-10- 9 (P) | | | | |
| SW-10-10 (P) | | | | |
| SW-10-12 (P) | | | | |

→ SW Series
→ Size
→ No. of Contacts

Silver contact

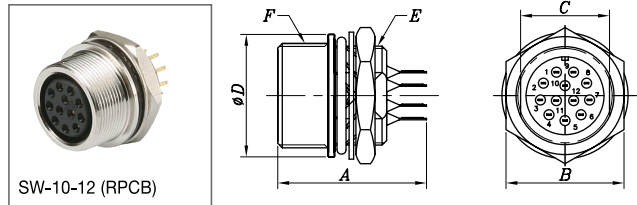
Include '-S' at end of Product Number.
EX) SW-8-4 (P)-S
SW-10-12 (P)-S

SW Solder Type Receptacle



| Product Number | A | B | C | Ø D | E | F |
|----------------|------|----|-----|------|-----------|------------|
| SW- 8- 4 (R) | 14,5 | 10 | 7,5 | 10 | M8×0,5P | M9×0,5P |
| SW- 8- 5 (R) | | | | | | |
| SW- 8- 6 (R) | | | | | | |
| SW-10- 2 (R) | 15 | 13 | 9,8 | 13,5 | M11×0,75P | M11,5×0,5P |
| SW-10- 3 (R) | | | | | | |
| SW-10- 4 (R) | | | | | | |
| SW-10- 9 (R) | | | | | | |
| SW-10-10 (R) | | | | | | |
| SW-10-12 (R) | | | | | | |

SW PCB Type Receptacle

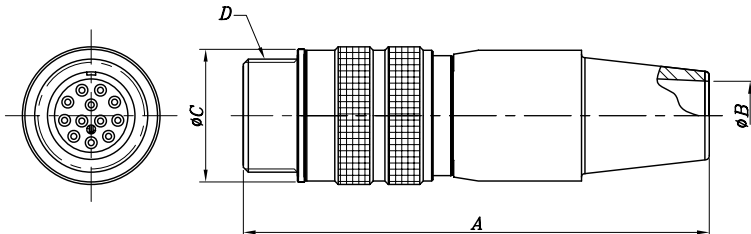


| Product Number | A | B | C | Ø D | E | F |
|-----------------|------|----|-----|------|-----------|------------|
| SW- 8- 4 (RPCB) | 15,7 | 10 | 7,5 | 10 | M8×0,5P | M9×0,5P |
| SW- 8- 5 (RPCB) | | | | | | |
| SW- 8- 6 (RPCB) | | | | | | |
| SW-10- 9 (RPCB) | 15,7 | 13 | 9,8 | 13,5 | M11×0,75P | M11,5×0,5P |
| SW-10-10(RPCB) | | | | | | |
| SW-10-12(RPCB) | | | | | | |

Silver contact

Include '-S' at end of Product Number.
EX) SW-8-4 (RPCB)-S
SW-10-12 (R)-S

SW Adapter



| Product Number | A | Ø B | Ø C | D | Product Number | A | Ø B | Ø C | D |
|----------------|-----------|-----|-----|---------|----------------|----|-----|------|------------|
| SWA-8-4 | 39,3 | 5,1 | 10 | M9×0,5P | SWA-10- 2 | 47 | 7 | 13,5 | M11,5×0,5P |
| SWA-8-5 | | | | | SWA-10- 3 | | | | |
| SWA-8-6 | | | | | SWA-10- 4 | | | | |
| | SWA-10- 9 | | | | | | | | |
| | SWA-10-10 | | | | | | | | |
| | SWA-10-12 | | | | | | | | |

→ SWA Series
→ Size
→ No. of Contacts

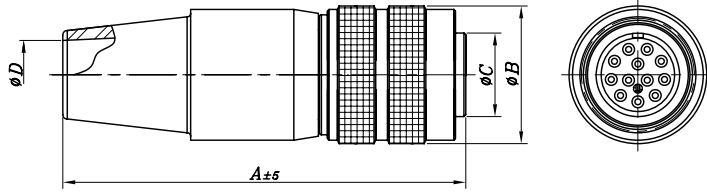


Silver contact

Include '-S' at end of Product Number.
EX) SWA-8-4-S
SWA-10-12-S

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SWH Plug



SWH-10-12(P)

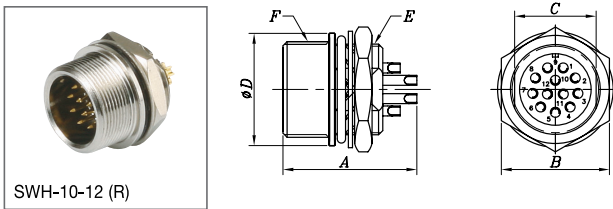
Silver Plating Contact
 Include '-S' at end of Product Number,
 EX) SWH-8-4 (P)-S
 SWH-10-12 (P)-S

| Product Number | A | ø B | ø C | ø D |
|----------------|----|-----|-----|-----|
| SWH-8-4 (P) | 35 | 11 | 6,7 | 5,1 |
| SWH-8-5 (P) | | | | |
| SWH-8-6 (P) | | | | |

→ SWH Series
 → Size
 → No. of Contacts

| Product Number | A | ø B | ø C | ø D |
|----------------|----|-----|-----|-----|
| SWH-10- 2 (P) | 42 | 14 | 8,5 | 7 |
| SWH-10- 3 (P) | | | | |
| SWH-10- 4 (P) | | | | |
| SWH-10- 9 (P) | | | | |
| SWH-10-10 (P) | | | | |
| SWH-10-12 (P) | | | | |

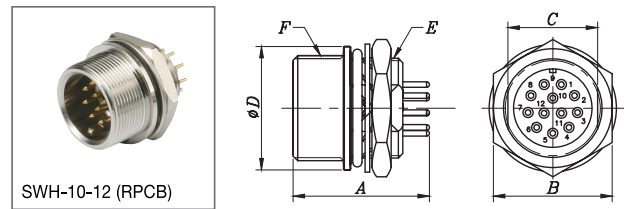
■ SWH Solder Type Receptacle



SWH-10-12 (R)

| Product Number | A | B | C | ø D | E | F |
|----------------|------|----|-----|------|-----------|------------|
| SWH- 8- 4 (R) | 14,2 | 10 | 7,5 | 10 | M8×0,5P | M9×0,5P |
| SWH- 8- 5 (R) | | | | | | |
| SWH- 8- 6 (R) | | | | | | |
| SWH-10- 2 (R) | 16,2 | 13 | 9,8 | 13,5 | M11×0,75P | M11,5×0,5P |
| SWH-10- 3 (R) | | | | | | |
| SWH-10- 4 (R) | | | | | | |
| SWH-10- 9 (R) | | | | | | |
| SWH-10-10 (R) | | | | | | |
| SWH-10-12 (R) | | | | | | |

■ SWH PCB Type Receptacle



SWH-10-12 (RPCB)

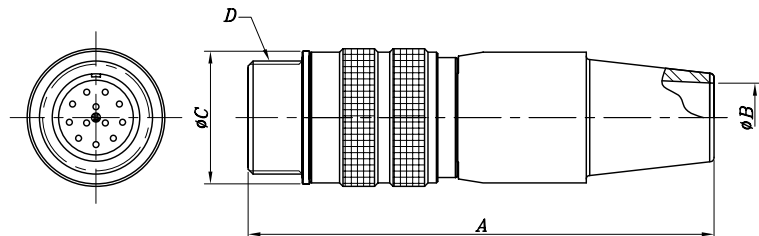
| Product Number | A | B | C | ø D | E | F |
|------------------|----|----|-----|------|-----------|------------|
| SWH- 8- 4 (RPCB) | 15 | 10 | 7,5 | 10 | M8×0,5P | M9×0,5P |
| SWH- 8- 5 (RPCB) | | | | | | |
| SWH- 8- 6 (RPCB) | | | | | | |
| SWH-10- 9(RPCB) | 15 | 13 | 9,8 | 13,5 | M11×0,75P | M11,5×0,5P |
| SWH-10-10(RPCB) | | | | | | |
| SWH-10-12(RPCB) | | | | | | |

Silver Plating Contact
 Include '-S' at end of Product Number,
 EX) SWH-8-4 (RPCB)-S
 SWH-10-12 (R)-S



SWHA-10-12

■ SWHA Adapter



| Product Number | A | ø B | ø C | D |
|----------------|------|-----|-----|---------|
| SWHA-8-4 | 39,3 | 5,1 | 10 | M9×0,5P |
| SWHA-8-5 | | | | |
| SWHA-8-6 | | | | |

→ SWHA Series
 → Size
 → No. of Contacts

| Product Number | A | ø B | ø C | D |
|----------------|----|-----|------|------------|
| SWHA-10- 2 | 47 | 7 | 13,5 | M11,5×0,5P |
| SWHA-10- 3 | | | | |
| SWHA-10- 4 | | | | |
| SWHA-10- 9 | | | | |
| SWHA-10-10 | | | | |
| SWHA-10-12 | | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

General Instruction / Information

- Diagram 1 shows a sample wiring for SW series.
- Soldering must be done quickly and carefully to prevent damage to insulator.
- Receptacles do not require additional instructions.
- Specification of Nut

| Size | Nut Specification | Nut tightening force |
|---------|-------------------|----------------------|
| SW - 8 | M8 × 0,5P | 15~18(kgf · cm) |
| SW - 10 | M11 × 0,75P | 20~23(kgf · cm) |

Wiring Sequence

- ① Select cable according to outer diameter and cross section, lower than 0,129mm²(AWG#26).
- ② Insert RUBBER BUSHING to cable.
- ③ Insert PLUG HOUSING to cable.
- ④ Strip cable per dimension given and loosen braid.
- ⑤ Secure PLUG BODY to jig for soldering.
- ⑥ Solder stripped cable to pin.
- ⑦ Fasten CRIMP using hand crimp tool (SA-HCT^①)
- ⑧ Lock PLUG HOUSING and PLUG BODY using tightening force displayed on Table 1.
- ⑨ Tighten WRENCH BOLT using 0,3N force onto one of two embossed parts of crimp.
- ⑩ Cover RUBBER BUSHING onto PLUG HOUSING.

^① See below for information on SA-HCT.

Diagram 1

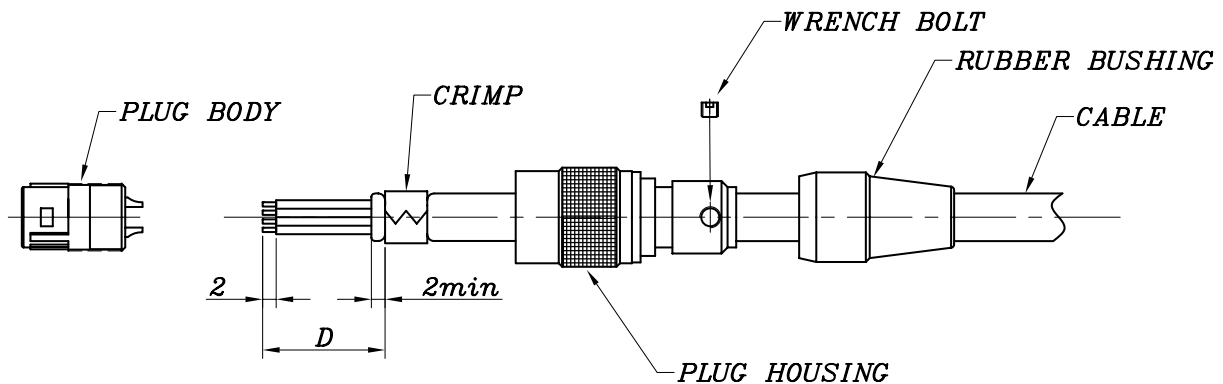


Table 1

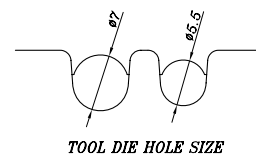
unit : mm

| Size | Spanner Jaw | D (Dimension) | Tightening Force | Notes |
|---------|-------------|---------------|-----------------------|-------------------------------|
| SW - 8 | 8 | 10 | 1,5N · m (15kgf · cm) | SA-HCT size \varnothing 5,5 |
| SW - 10 | 10 | 16 | 2,0N · m (20kgf · cm) | SA-HCT size \varnothing 7,0 |

SA-HCT (Hand Crimp Tool)



Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



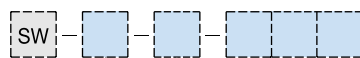
Features

- Excellent performance at low cost
- Screw mounting assures solid connection
- Manufactured with precision
- Standard and Custom Design

Applications

- Professional audio and video
- CCTV system
- Vision related testing equipment
- Portable wireless radio
- Measuring equipment
- Computers and peripherals
- Medical, and much more.

■ Part Numbering



Drawing Number
Optional Suffix (Omissible)
 1,2,3
 To indicate modification of original
Cable Length : 3 Digits
 Unit Plug : m
 Recep : cm
 Ex) Using 3m Cable for Plug : 003
 Using 30cm Cable for Recep : 030

■ Plug Cable Assembly



| Type | Construction |
|------|-------------------------------------|
| A | SW Connector + Cable + Housing |
| B | SW Connector + Cable + SW Connector |

※ Design and Customization Service Available

■ Receptacle Cable Assembly



| Type | Construction |
|------|---|
| A | SW Connector + wire + open end |
| B | SW Connector + wire + Housing |
| C | SW Connector + wire + Housing with core |

※ Design and Customization Service Available

SW IP67 Series Part Numbering



Features

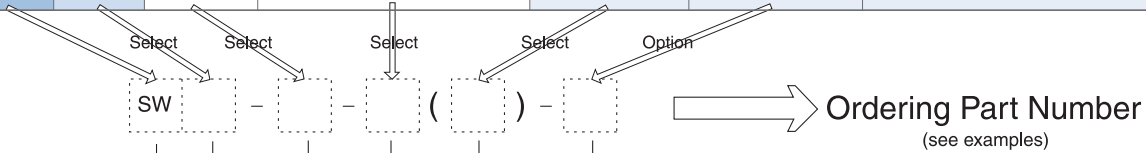
- Excellent performance at low cost
- Screw mounting assures solid connection
- Rubber gasket assures water resistance
- Manufactured with precision
- Protection rating of IP67 with over molding

Applications

- Professional audio and video
- CCTV system
- Vision related testing equipment
- Portable wireless radio
- Measuring equipment
- Computers and peripherals
- Medical, and much more.

Part Numbering

| Product Number | | Size | Number of Contacts | Suffix | Optional Suffix | Notes |
|----------------|--------|--------------------|--|----------|-----------------|--|
| Series | Prefix | | | | S | |
| SW | | 8W, 10W, 16W | 8W size : 4,5,6 10W size : 2,3,4,9,10,12 16W size : 28 | P | • | Main SW Series |
| | | | | R / RPCB | • | |
| | H | | | P | • | SWH Series (SW with reverse contacts) |
| | A | | | R / RPCB | • | |
| | HA | | | | • | SWA Series (Adapter for SW series) |
| | | | | | • | SWHA Series (Adapter for SWH series) |



Connector Series
 SW
 SWH - reverse contact
 SWA - adapter for SN series
 SWHA - adapter for SNH series

Size
 8W,10W,16W

No. of Contacts
 8 Size : 4,5,6
 10 Size : 2,3,4,9,10,12
 16 Size : 28

Body Type
 P : Plug
 R : Receptacle (solder termination)
 PR : Receptacle (Flange type)
 RPCB : Receptacle (PCB termination)
 blank : Adapter

Optional
 S : Silver Plating Contact

Examples

- SW - 8W - 4 (P)
SW Waterproof series - Size 8 Plug - 4 Male Contact
- SW - 10W - 12 (RPCB) - S
SW Waterproof series - Size 10 Receptacle - 12 PCB Termination Contact - Silver Plating Contact
- SWHA - 10W - 12
SWH Waterproof series - Size 10 Adapter - 12 Male Contact

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

Major Performances / Contact Arrangements

| Size / No. of Contacts | Size 8 | | | Size 16 | | |
|--|----------|----------|----------|----------|----------|----------|
| | 4 | 5 | 6 | 28 | | |
| Performance | IP 67 | | | | | |
| Withstanding Voltage (per min) ¹ | AC 300V | AC 300V | AC 300V | AC 300V | | |
| Current | 2A | 2A | 2A | 2A | | |
| Insulation Resistance (Minimum) ² | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω | | |
| Contact Resistance (Maximum) ³ | 10m Ω | 10m Ω | 10m Ω | 10m Ω | | |
| Solder Pot Inside Diameter | ∅ 0,7 | ∅ 0,7 | ∅ 0,7 | ∅ 0,7 | | |
| Wire Gauge(Maximum) | AWG26 | AWG26 | AWG26 | AWG26 | | |
| Contact Arrangement | | | | | | |
| Environmental Protection | IP 67 | | | | | |
| Size / No. of Contacts | Size 10 | | | | | |
| | 2 | 3 | 4 | 9 | 10 | 12 |
| Performance | IP 67 | | | | | |
| Withstanding Voltage (per min) ¹ | AC 500V | AC 500V | AC 500V | AC 300V | AC 300V | AC 300V |
| Current | 3A | 3A | 3A | 2A | 2A | 2A |
| Insulation Resistance (Minimum) ² | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω | 1,000M Ω |
| Contact Resistance (Maximum) ³ | 10m Ω | 10m Ω | 10m Ω | 10m Ω | 10m Ω | 10m Ω |
| Solder Pot Inside Diameter | ∅ 1,0 | ∅ 1,0 | ∅ 1,0 | ∅ 0,7 | ∅ 0,7 | ∅ 0,7 |
| Wire Gauge(Maximum) | AWG20 | AWG20 | AWG20 | AWG26 | AWG26 | AWG26 |
| Contact Arrangement | | | | | | |
| Environmental Protection | IP 67 | | | | | |

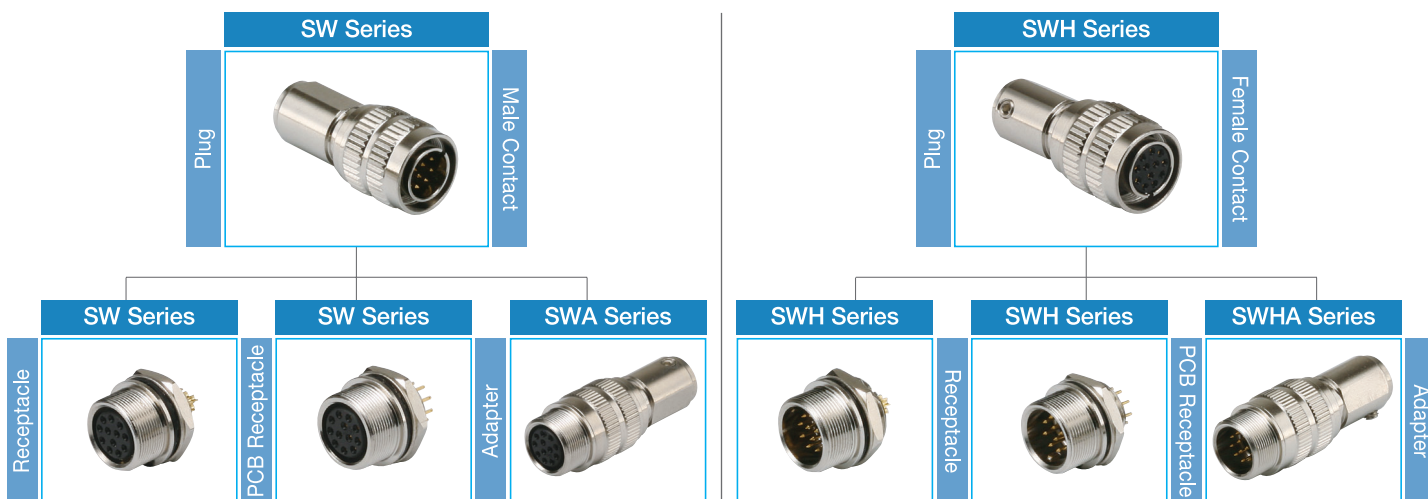
¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
 • Specifications subject to change without notice.
 • Consult Sam Woo Electronics for the latest specifications.
⁴ Connector contact arrangement is from mating surface.

Contact Diameter
 ∅ 0,55mm • 1,0mm

Material Used / Finish

| | Material | Finish |
|-----------|----------|-----------------|
| Body | Brass | Ni Plating |
| Insulator | PA | Black |
| Contacts | Male | Brass |
| | Female | Phosphor bronze |
| | | Gold Plating |

SW Series Mini-map

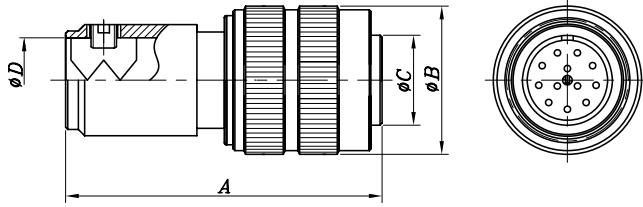


SW IP67 Series

Male Plug, Female Receptacle/Adapter



SW Plug



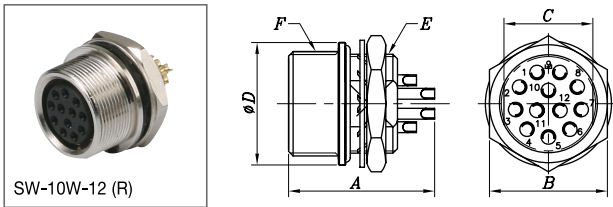
SW-10W-12(P)

| Product Number | A | ∅ B | ∅ C | ∅ D | Product Number | A | ∅ B | ∅ C | ∅ D |
|----------------|---------------|-----|-----|-----|----------------|----|-----|-----|-----|
| SW-8W-4 (P) | 24,5 | 12 | 6,7 | 6,0 | SW-10W- 2 (P) | 30 | 15 | 9,5 | 7 |
| SW-8W-5 (P) | | | | | SW-10W- 3 (P) | | | | |
| SW-8W-6 (P) | | | | | SW-10W- 4 (P) | | | | |
| | SW-10W- 9 (P) | | | | | | | | |
| | SW-10W-10 (P) | | | | | | | | |
| | SW-10W-12 (P) | | | | | | | | |

→ SW Series
 → Size & Type
 → No. of Contacts

Silver Plating Contact
 Include '-S' at end of Product Number,
 EX) SW-8W-4 (P)-S
 SW-10W-12 (P)-S

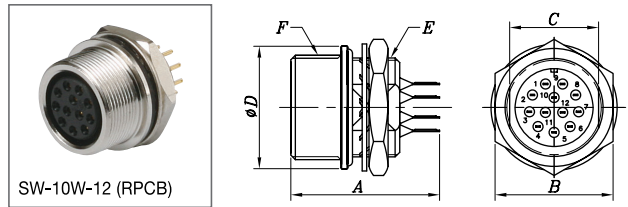
SW Solder Type Receptacle



SW-10W-12 (R)

| Product Number | A | B | C | ∅ D | E | F |
|----------------|------|----|-----|------|-----------|------------|
| SW- 8W-4 (R) | 14,2 | 10 | 7,5 | 11 | M8×0,5P | M10×0,5P |
| SW- 8W-5 (R) | | | | | | |
| SW- 8W-6 (R) | | | | | | |
| SW-10W-2 (R) | 15,8 | 13 | 9,8 | 14,5 | M11×0,75P | M12,5×0,5P |
| SW-10W-3 (R) | | | | | | |
| SW-10W-4 (R) | | | | | | |
| SW-10W-9 (R) | | | | | | |
| SW-10W-10 (R) | 16,2 | | | | | |
| SW-10W-12 (R) | | | | | | |

SW PCB Type Receptacle

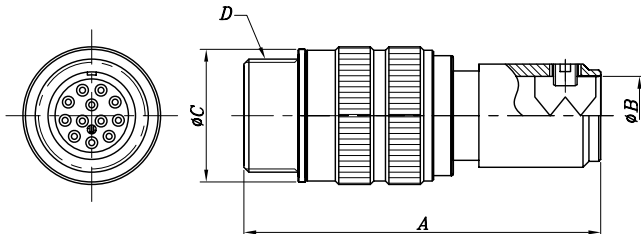


SW-10W-12 (RPCB)

| Product Number | A | B | C | ∅ D | E | F |
|-----------------|------|----|-----|------|-----------|------------|
| SW- 8W-4 (RPCB) | 15,7 | 10 | 7,5 | 11 | M8×0,5P | M10×0,5P |
| SW- 8W-5 (RPCB) | | | | | | |
| SW- 8W-6 (RPCB) | | | | | | |
| SW-10W-9(RPCB) | 16,4 | 13 | 9,8 | 14,5 | M11×0,75P | M12,5×0,5P |
| SW-10W-10(RPCB) | | | | | | |
| SW-10W-12(RPCB) | | | | | | |

Silver Plating Contact
 Include '-S' at end of Product Number,
 EX) SW-8W-4 (RPCB)-S
 SW-10W-12 (R)-S

SWA Adapter



SWA-10W-12

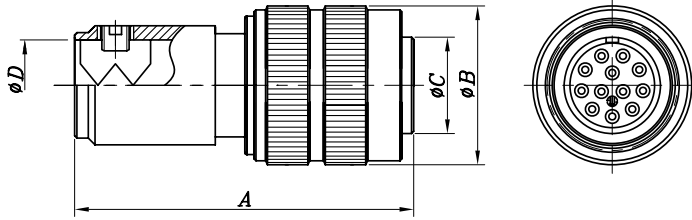
| Product Number | A | ∅ B | ∅ C | D | Product Number | A | ∅ B | ∅ C | D |
|----------------|------------|-----|-----|----------|----------------|----|-----|------|------------|
| SWA-8W-4 | 31 | 6,0 | 11 | M10×0,5P | SWA-10W-2 | 37 | 7 | 14,5 | M12,5×0,5P |
| SWA-8W-5 | | | | | SWA-10W-3 | | | | |
| SWA-8W-6 | | | | | SWA-10W-4 | | | | |
| | SWA-10W-9 | | | | | | | | |
| | SWA-10W-10 | | | | | | | | |
| | SWA-10W-12 | | | | | | | | |

→ SWA Series
 → Size & Type
 → No. of Contacts

Silver Plating Contact
 Include '-S' at end of Product Number,
 EX) SWA-8W-4-S
 SWA-10W-12-S

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SWH Plug



SWH-10W-12(P)

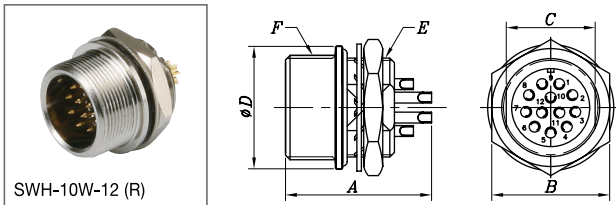
| Product Number | A | ø B | ø C | ø D | Product Number | A | ø B | ø C | ø D |
|----------------|----------------|-----|-----|-----|----------------|----|-----|-----|-----|
| SWH-8W-4 (P) | 24,5 | 12 | 6,7 | 6,0 | SWH-10W- 2 (P) | 30 | 15 | 9,5 | 7 |
| SWH-8W-5 (P) | | | | | SWH-10W- 3 (P) | | | | |
| SWH-8W-6 (P) | | | | | SWH-10W- 4 (P) | | | | |
| | SWH-10W- 9 (P) | | | | | | | | |
| | SWH-10W-10 (P) | | | | | | | | |
| | SWH-10W-12 (P) | | | | | | | | |

Silver Plating Contact

Include '-S' at end of Product Number,
EX) SWH-8W-4 (P)-S
SWH-10W-12 (P)-S

SWH Series
Size & Type
No. of Contacts

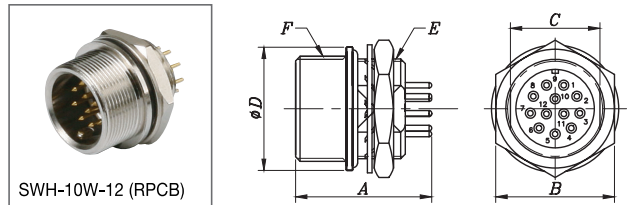
■ SWH Solder Type Receptacle



SWH-10W-12 (R)

| Product Number | A | B | C | ø D | E | F |
|----------------|------|----|-----|------|-----------|------------|
| SWH- 8W- 4 (R) | 14,2 | 10 | 7,5 | 11 | M8×0,5P | M10×0,5P |
| SWH- 8W- 5 (R) | | | | | | |
| SWH- 8W- 6 (R) | | | | | | |
| SWH-10W- 2 (R) | 16,3 | 13 | 9,8 | 14,5 | M11×0,75P | M12,5×0,5P |
| SWH-10W- 3 (R) | | | | | | |
| SWH-10W- 4 (R) | | | | | | |
| SWH-10W- 9 (R) | | | | | | |
| SWH-10W-10 (R) | | | | | | |
| SWH-10W-12 (R) | | | | | | |

■ SWH PCB Type Receptacle



SWH-10W-12 (RPCB)

| Product Number | A | B | C | ø D | E | F |
|-------------------|------|----|-----|------|-----------|------------|
| SWH- 8W- 4 (RPCB) | 15,1 | 10 | 7,5 | 11 | M8×0,5P | M10×0,5P |
| SWH- 8W- 5 (RPCB) | | | | | | |
| SWH- 8W- 6 (RPCB) | | | | | | |
| SWH-10W- 9(RPCB) | 15,1 | 13 | 9,8 | 14,5 | M11×0,75P | M12,5×0,5P |
| SWH-10W-10(RPCB) | | | | | | |
| SWH-10W-12(RPCB) | | | | | | |

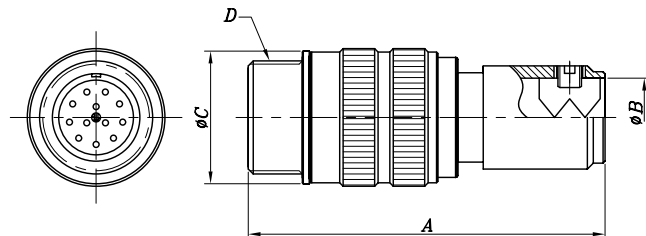
Silver Plating Contact

Include '-S' at end of Product Number,
EX) SWH-8W-4 (RPCB)-S
SWH-10W-12 (R)-S



SWHA-10W-12

■ SWHA Adapter



| Product Number | A | ø B | ø C | D | Product Number | A | ø B | ø C | D |
|----------------|-------------|-----|-----|----------|----------------|----|-----|------|------------|
| SWHA-8W-4 | 31 | 6,0 | 11 | M10×0,5P | SWHA-10W- 2 | 37 | 7 | 14,5 | M12,5×0,5P |
| SWHA-8W-5 | | | | | SWHA-10W- 3 | | | | |
| SWHA-8W-6 | | | | | SWHA-10W- 4 | | | | |
| | SWHA-10W- 9 | | | | | | | | |
| | SWHA-10W-10 | | | | | | | | |
| | SWHA-10W-12 | | | | | | | | |

Silver Plating Contact

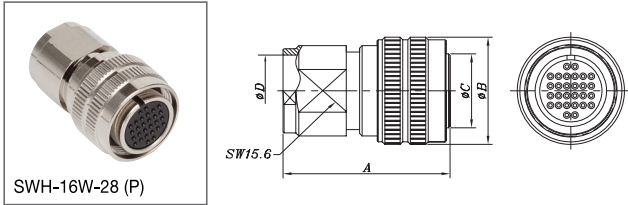
Include '-S' at end of Product Number,
EX) SWHA-8W-4-S
SWHA-10W-12-S

SWHA Series
Size & Type
No. of Contacts

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

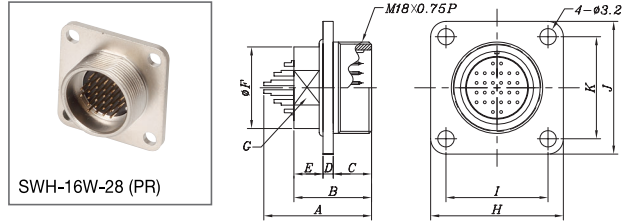
SW IP67 Series Female Plug, Male Receptacle

SWH-16W Plug



| Product Number | A | ∅ B | ∅ C | ∅ D |
|----------------|------|-----|------|-----|
| SWH-16W-28 (P) | 32,8 | 21 | 14,5 | 14 |

SWH-16W Receptacle



| Product Number | A | B | C | D | E | ∅ F | G | H | I | J | K |
|----------------|----|------|-----|---|-----|-----|------|----|----|----|----|
| SWH-16W-28(PR) | 21 | 15,2 | 7,5 | 2 | 5,7 | 16 | 14,5 | 26 | 20 | 26 | 20 |



General Instruction / Information

- Diagram 1 shows a sample wiring for SW IP67 Waterproof Series.
- Soldering must be done quickly and carefully to prevent damage to insulator.
- Receptacles do not require additional instructions.
- Specification of Nut

| Size | Nut Specification | Nut tightening force |
|----------|-------------------|----------------------|
| SW - 8W | M8×0,5P | 15~18(kgf · cm) |
| SW - 10W | M11×0,75P | 20~23(kgf · cm) |

Wiring Sequence

- ① Select cable according to outer diameter and cross section, lower than 0,129mm²(AWG#26).
- ② Insert PLUG HOUSING to cable.
- ③ Strip cable per dimension given and loosen braid.
- ④ Secure PLUG BODY to jig for soldering.
- ⑤ Solder stripped cable to pin.
- ⑥ Fasten CRIMP using hand crimp tool (SA-HCT^①)
- ⑦ Lock PLUG HOUSING and PLUG BODY using tightening force displayed on Table 1.
- ⑧ Tighten WRENCH BOLT using 0,3N force onto one of two embossed parts of crimp.
- * ⑨ Plug Housing must be overmolded in order to achieve IP67 rating.

^① See below for information on SA-HCT.

Diagram 1

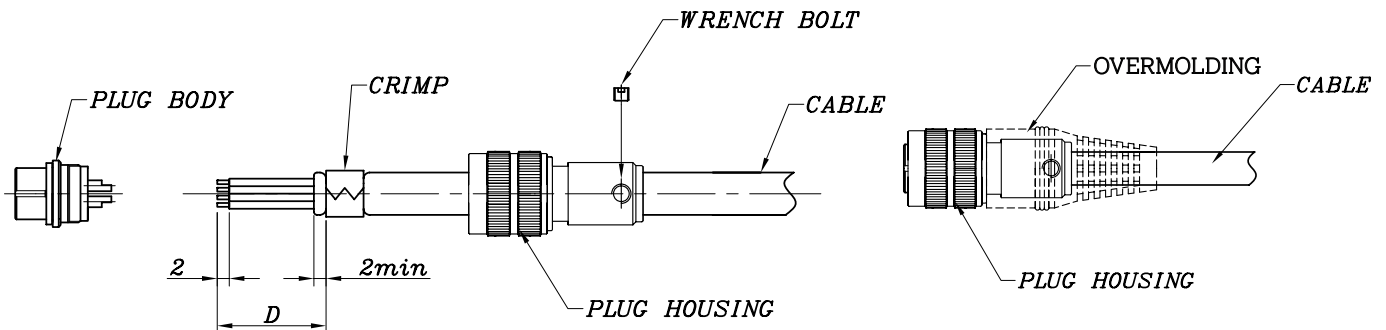


Table 1

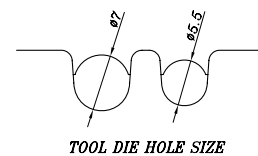
| Size | Spanner Jaw | D (Dimension) | Tightening Force | Notes |
|---------|-------------|---------------|-----------------------|------------------------|
| SW - 8 | 8 | 10 | 1,5N · m (15kgf · cm) | SA-HCT size ϕ 5,5 |
| SW - 10 | 10 | 16 | 2,0N · m (20kgf · cm) | SA-HCT size ϕ 7,0 |

unit : mm

SA-HCT (Hand Crimp Tool)

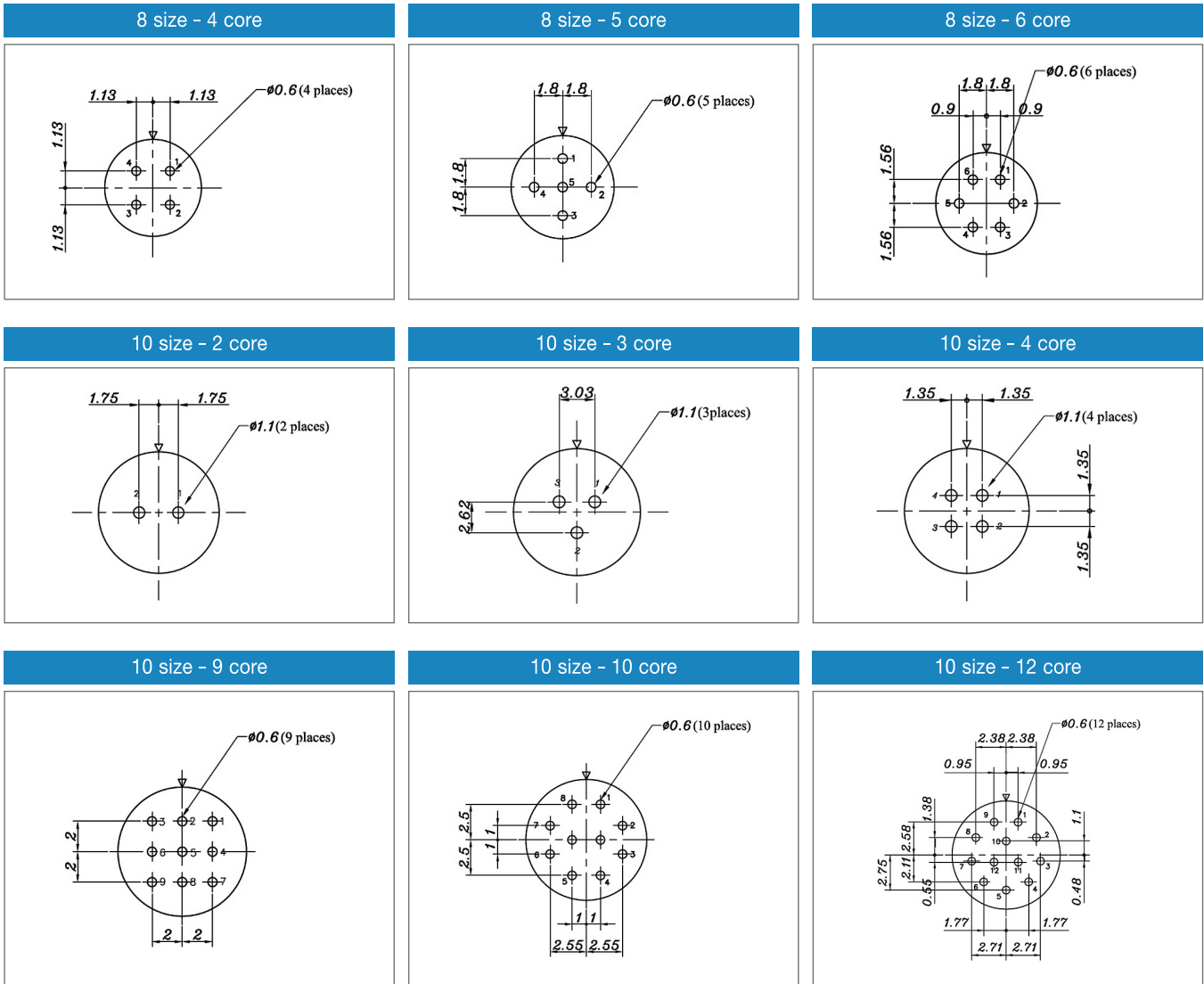


Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.

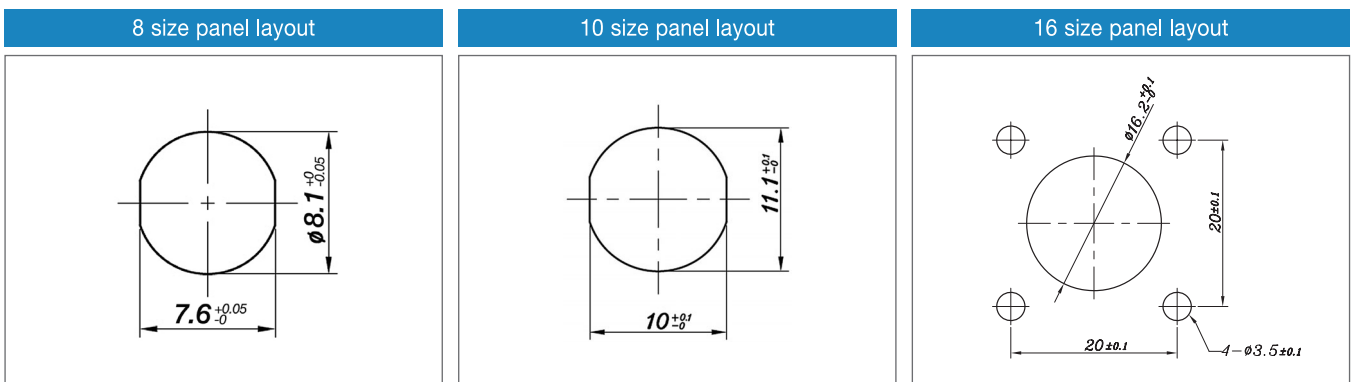


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ **SW Receptacle PCB Hole Layout**



■ **SW Receptacle Panel Layout**



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



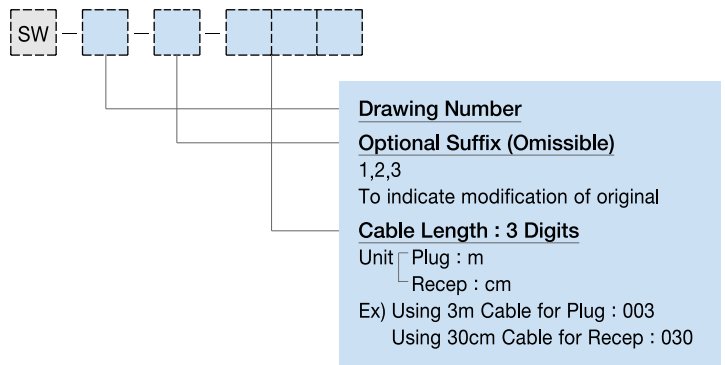
Features

- Excellent performance at low cost
- Screw mounting assures solid connection
- Rubber gasket assures water resistance
- Manufactured with precision
- Protection rating of IP67 with over molding
- Standard and Custom Design

Applications

- Professional audio and video
- Vision related testing equipment
- Measuring equipment
- Medical, and much more.
- CCTV system
- Portable wireless radio
- Computers and peripherals

■ **Part Numbering**



■ **Plug Cable Assembly**



| Type | Construction |
|------|-------------------------------------|
| A | SW Connector + Cable + Housing |
| B | SW Connector + Cable + SW Connector |

※ Design and Customization Service Available

■ **Receptacle Cable Assembly**



| Type | Construction |
|------|---|
| A | SW Connector + wire + open end |
| B | SW Connector + wire + Housing |
| C | SW Connector + wire + Housing with core |

※ Design and Customization Service Available

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SXR Series Part Numbering



Features

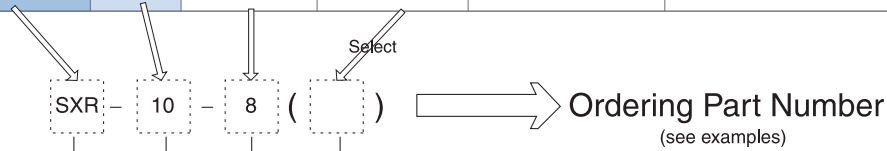
- Miniature
- Ultra Light Weight
- Ground Function

Applications

- Professional Audio
- Professional Video
- Camera

Part Numbering

| Series | Size | Number of Contacts | Suffix | Contact Type | Notes |
|--------|------|--------------------|--------|--------------|-----------------------|
| SXR | 10 | 8 | P | Male | SXR Series Plug |
| | | | R | Female | SXR Series Receptacle |



Connector Series

SXR Series

Size

10

No. of Contacts

8

Body Type

P : Plug

R : Receptacle (solder termination)

Examples

SXR - 10 - 8 (P)

SXR series - Size 10 Plug - 8 Male Contact

SXR - 10 - 8 (R)

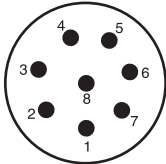
SXR series - Size 10 Receptacle - 8 Female Contact

Material Used / Finish

| | | Material | Finish |
|-----------|--------|-----------------|----------------|
| Body | | Alluminum alloy | Ni Plating |
| Insulator | | PBT resin | Black |
| Contacts | Male | Brass | Silver Plating |
| | Female | Phosphor bronze | Silver Plating |

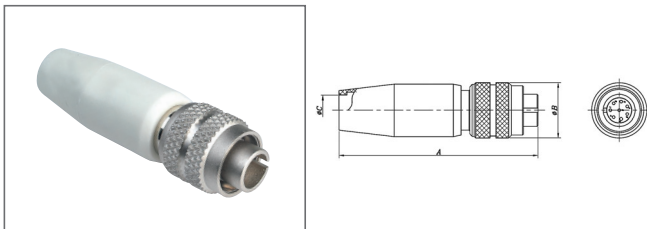
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Major Performances / Contact Arrangements

| Size / No. of Contacts | Size 10 |
|--|--|
| Performance | 8 |
| Withstanding Voltage (per min) ¹ | AC 300V |
| Rated Current | 2A |
| Insulation Resistance (Minimum) ² | 1,000M Ω |
| Contact Resistance (Maximum) ³ | 20m Ω |
| Solder Pot Inside Diameter | φ 0,9 |
| Wire Gauge (Maximum) | AWG20 |
| Contact Arrangement |  |

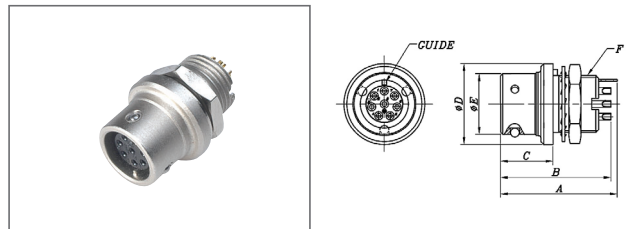
¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
 • Specifications subject to change without notice.
 • Consult Sam Woo Electronics for the latest specifications.
⁴ Connector contact arrangement is from mating surface.

■ SXR Plug



| Product Number | A | φ B | φ C |
|----------------|------|------|-----|
| SXR-10-8 (P) | 50,0 | 14,0 | 8,0 |

■ SXR Receptacle



| Product Number | A | B | C | φ D | φ E | F |
|----------------|------|------|-----|-----|------|-----------|
| SXR-10-8 (R) | 20,2 | 19,1 | 9,1 | 14 | 10,5 | M10×0,75P |

■ SXR Series Mini-map





RF/Microwave Connectors

| | |
|--|-----|
| RF / Microwave Overview | 146 |
| Triaxial 75 Ω SB | 150 |
| Stereo Plug STE | 160 |
| Miniature Performance and Features | 164 |
| SMA | 165 |
| SMB | 167 |
| MCX | 168 |
| MMCX | 170 |
| BNCCHD | 172 |
| BNC 75 Ω | 176 |
| High Frequency Performance and Features | 184 |
| BNC 50 Ω | 185 |
| N | 187 |
| M | 189 |
| TNC | 190 |
| Others Between-Series Adapter | 192 |
| MRF | 194 |
| D-tap | 196 |
| POWER PIN | 198 |
| Micro USB IP67 Cable Assembly .. | 199 |

SB Series

P.150



Applications

Professional TV Camera
Broadcasting Industry

Features

Triaxial 75 Ω
High-performance
Rigorous design

Material / Finish

Body - Brass (Ni & Chrome III Plating)
Insulator - PTFE
Contacts - Brass (Gold Plating)
Latch Sleeve - Brass (Ni Plating) or
Beryllium copper (Ni Plating)

STE

P.160



Features

Screw Locking System
Patented Design
Easy Soldering

Material / Finish

Nousing / Shell - Brass (Ni Plating)
Insulator - POM
Contacts - Brass (Ni Plating)
Strain Relief - Crimp Brass(Ni Plating)
Boot - Silicon

SMA

P.165



Features

Ideal for 18GHz or higher
Maximum reliability
Superb robustness
MIL-C-39012 specification

Material / Finish

Body - Brass
Insulator - PTFE
Contacts - Brass

SMB

P.167



Features

Snap-on quick connection
Frequency of 4GHz
MIL-C-39012 specification

Material / Finish

Body - Brass
Insulator - PTFE
Contacts - Brass

MCX

P.168



Features

MIL-C-39012 specification
Frequency up to 2GHz

Material / Finish

Body - Brass
Insulator - PTFE
Contacts - Brass

MMCX

P.170



Features

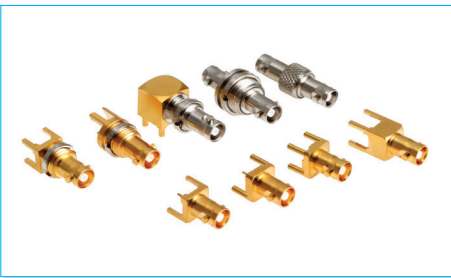
MIL-C-39012 specification
Frequency up to 2GHz
50% less space than MCX
Snap-on

Material / Finish

Body - Brass
Insulator - PTFE
Contacts - Brass

BNCCHD

P.172



Features

Top-quality performing 75 Ω BNC
High density
Quick and reliable connection

Material / Finish

Body - Brass
Insulator - PTFE
Contacts - Brass / Gold Plating Cu-Be /
Gole plating

BNC 75 Ω

P.176



Applications

TV broadcasting, CCTV,
CATV Transmitters, LAN,
Telecommunications,
Satellite receivers, medical, etc.

Features

Top quality 75 Ω
Frequency from 0 to 3GHz

Material / Finish

Body - Zinc alloy or Brass / Ni Plating
Insulator - PTFE
Contacts - Brass / Gold Plating / Beryllium
copper / Gold Plating

RF / Microwave Connector

BNC 50 Ω , N,M,TNC P.184



Features

High frequency coaxial
75 Ω available upon request

Material / Finish

Body - Brass
Insulator - PTFE
Contacts - Brass

Between-Series Adapter P.192



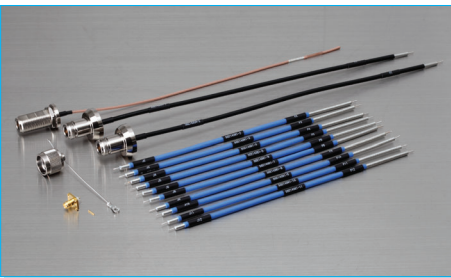
Features

- BNC-N
- BNC-SMA
- M-RCA
- N-SMA
- BNC-M
- BNC-TNC
- N-M
- N-TNC

Material / Finish

Body - Brass
Insulator - PTFE
Contacts - Brass

MRF P.194



Features

- MRF-SW-5708
- MRF-SW-5759-XX
- MRF-SW-5706-XX
- MRF-N-RC
- MRF-PIN
- MRF-SMASH-JPR-4H
- MRF-N-J-RB-RC

Material / Finish

Body - Brass
Insulator - PTFE
Contacts - Brass

D-Tap P.196



Features

- SW-DTAP-20
- SW-DTAP-2J

Material / Finish

Body - PC
Insulator - PC
Contacts - Brass / Gold Plating

POWER PIN

P.198



Features

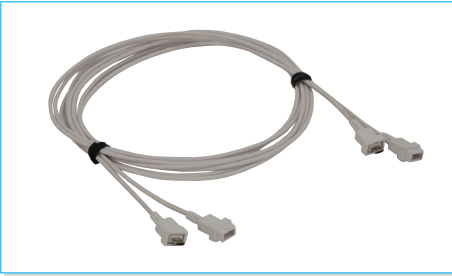
POWER PIN (Ni / Au) - 2,1
POWER PIN (Ni / Au) - 4,0

Material / Finish

PIN - Brass
Tension Plate - Brass

Micro USB IP67 Cable Assembly

P.199



Features

Micro USB 5PIN Male Cable Assembly (IP67)
Micro USB 5PIN Female Cable Assembly (IP67)



SB Series Triaxial



Features

- High performance
- Rigorous design

Applications

- Professional TV Camera
- Broadcasting Industry

SB-101 Part Numbering (European Standard)



Body Type

- P : Plug
- PFC : Plug Fixed with Clamping Device
- PFC1 : Plug Fixed with Short Clamping Device
- J : Jack
- RC : Receptacle with Clamping Device
- RC1 : Receptacle with Short Clamping Device
- APJF : Adapter (Plug - Jack) Flange

Accessory Code

- 1,0 / 4,5 / 8,7
- 1,0 / 4,5 / 9,4
- 1,4 / 4,5 / 9,4
- 1,4 / 6,6 / 11,3
- 1,4 / 6,6 (for PFC1)

SB-102 Part Numbering (American Standard)



Body Type

- P : Plug
- J : Jack

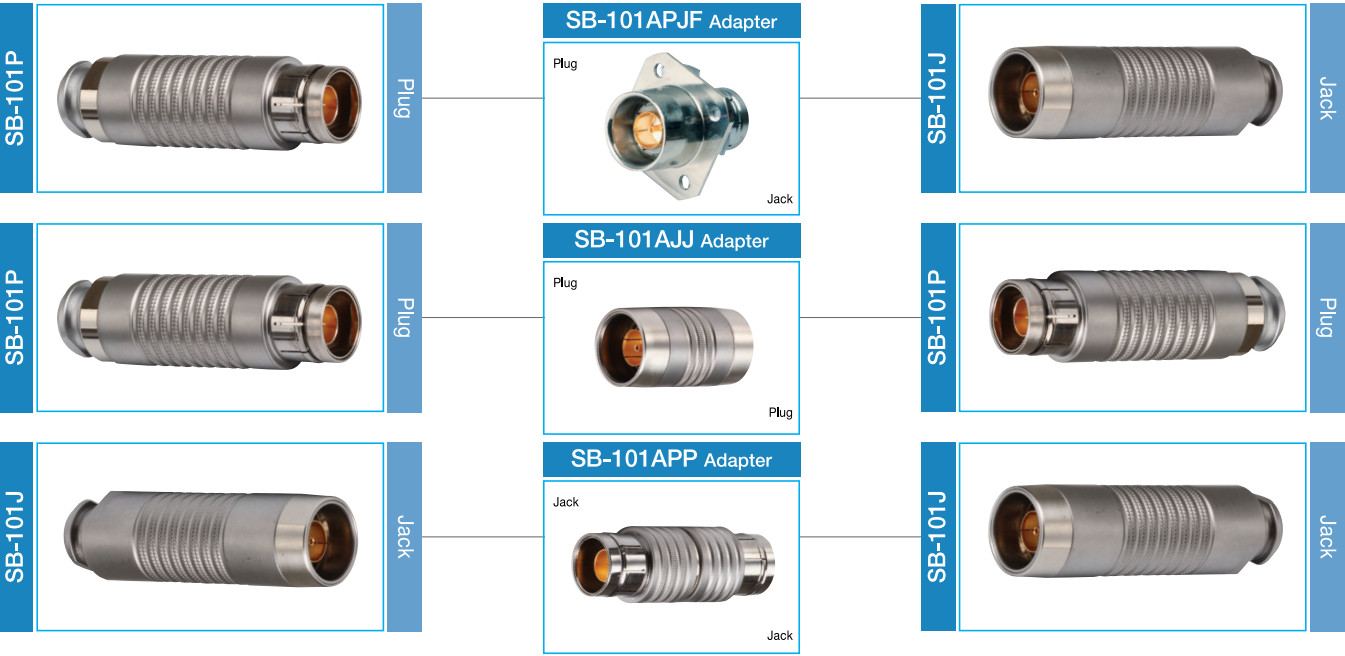
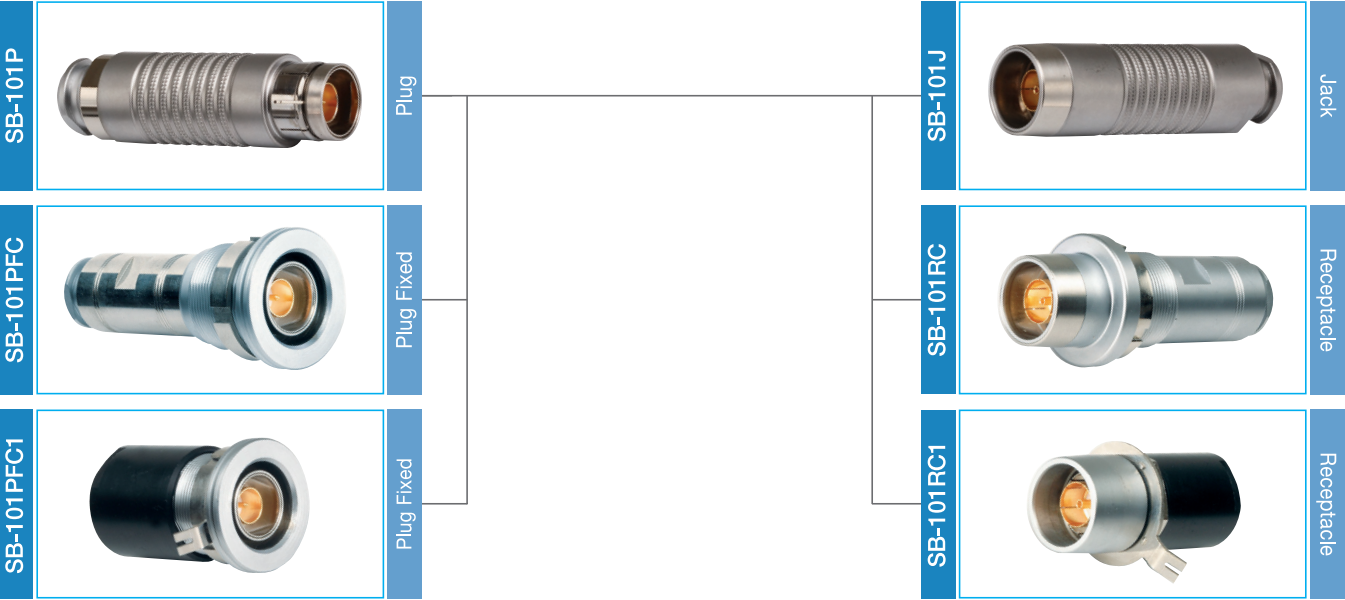
Accessory Code

- 0,81/3,7/9,5

Major Performances

| Specification | 101 Model | 102 Model | 770Model |
|-----------------------|------------------|----------------|----------------|
| Impedance | 75 Ω | 75 Ω | 75 Ω |
| VSWR | <1,2 upto 1,5GHz | <1,2 upto 1GHz | <1,2 upto 1GHz |
| Contact Resistance | <3m Ω | <3m Ω | <1m Ω |
| Operating Temperature | -55℃ ~ +135℃ | -55℃ ~ +135℃ | -20℃ ~ +70℃ |

SB Series Mini-map (European Standard)



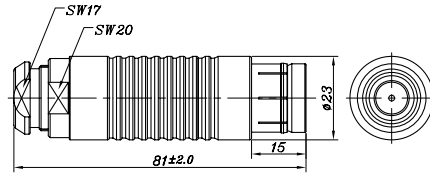
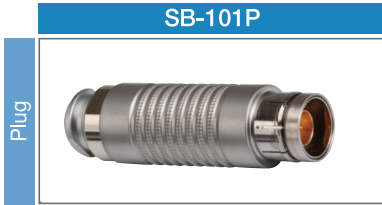
SB Series Mini-map (American Standard)



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

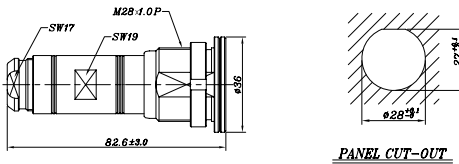
SB-101 Model (European Standard)

Includes accessories,
Accessories available separately.



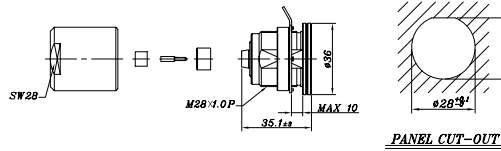
Product Number

SB-101P-1,0/4,5/8,7
SB-101P-1,0/4,5/9,4
SB-101P-1,4/4,5/9,4
SB-101P-1,4/6,6/11,3



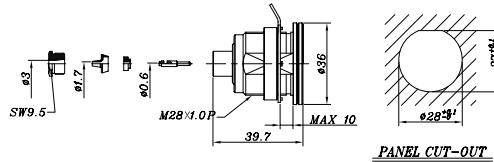
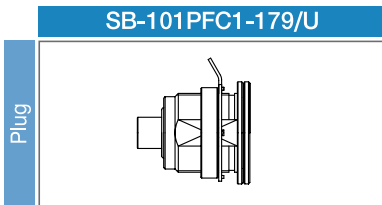
Product Number

SB-101PFC-1,0/4,5/8,7
SB-101PFC-1,0/4,5/9,4
SB-101PFC-1,4/4,5/9,4
SB-101PFC-1,4/6,6/11,3



Product Number

SB-101PFC1-1,4/6,6

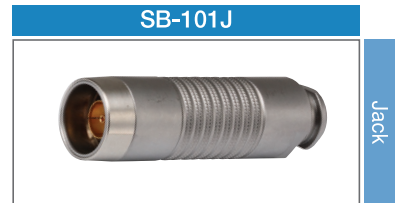
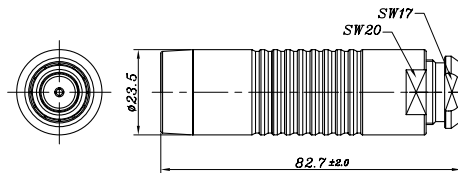


Product Number

SB-101PFC1-179/U
Plug for cable assembly

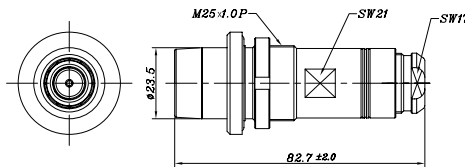
Product Number

SB-101J-1,0/4,5/8,7
SB-101J-1,0/4,5/9,4
SB-101J-1,4/4,5/9,4
SB-101J-1,4/6,6/11,3



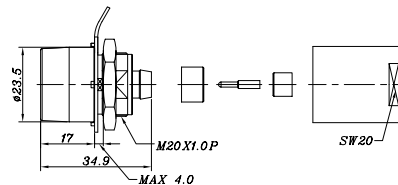
Product Number

SB-101RC-1,0/4,5/8,7
SB-101RC-1,0/4,5/9,4
SB-101RC-1,4/4,5/9,4
SB-101RC-1,4/6,6/11,3



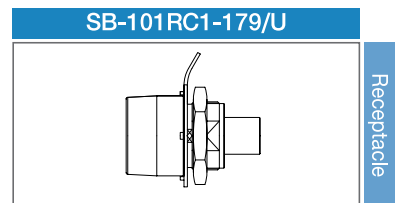
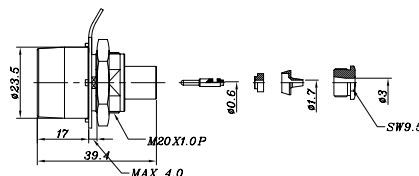
Product Number

SB-101RC1-1,4/6,6



Product Number

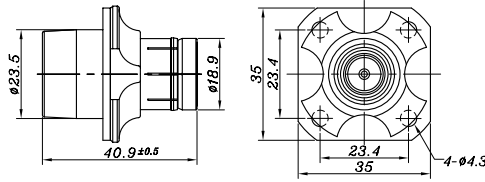
SB-101RC1-179/U
Receptacle for cable assembly



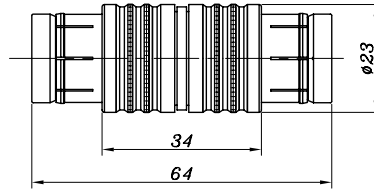
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ **SB-101 Model (European Standard)**

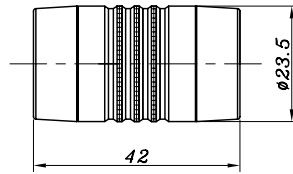
Adapter



Product Number
SB-101APJF
Adapter : Jack



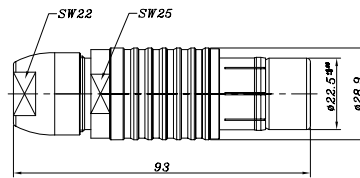
Product Number
SB-101APP
Adapter : Jack + Jack



Product Number
SB-101AJJ
Adapter : Plug + Plug

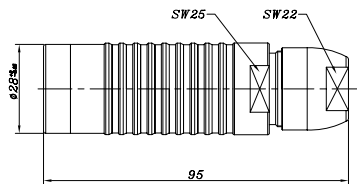
■ **SB-102 Model (American Standard)**

Includes accessories,
Accessories available separately,



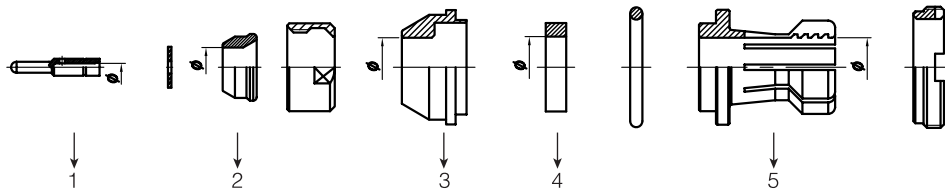
Product Number
SB-102P-0,81/3,7/9,5

Product Number
SB-102J-0,8/3,7/9,5



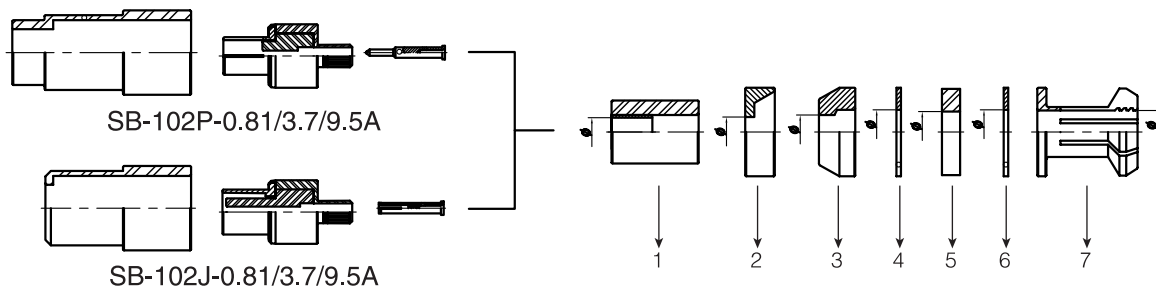
SB Series Accessories(Triaxial)

SB-101 Accessory



| Product Number | Diameter(φ) | | | | |
|--------------------------|-------------|-----|------|------|------|
| | 1 | 2 | 3 | 4 | 5 |
| SB-101-1,0 / 4,5 / 8,7A | 1,15 | 5,8 | 8,7 | 8,8 | 8,7 |
| SB-101-1,0 / 4,5 / 9,4A | 1,15 | 5,8 | 9,4 | 9,4 | 9,4 |
| SB-101-1,4 / 4,5 / 9,4A | 1,5 | 5,8 | 9,4 | 9,4 | 9,4 |
| SB-101-1,4 / 6,6 / 11,3A | 1,5 | 7,5 | 11,3 | 10,3 | 11,3 |

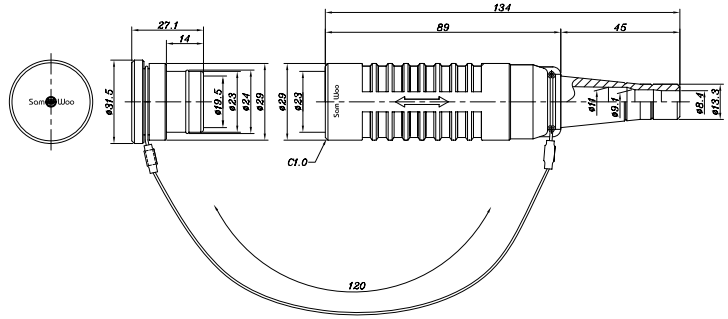
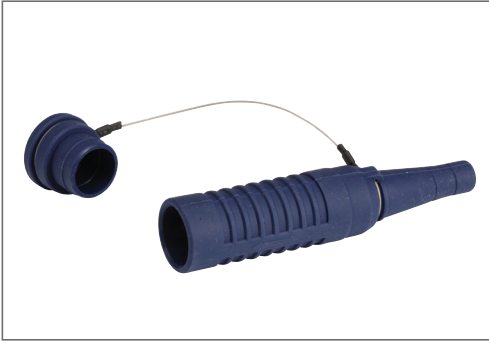
SB-102 Accessory



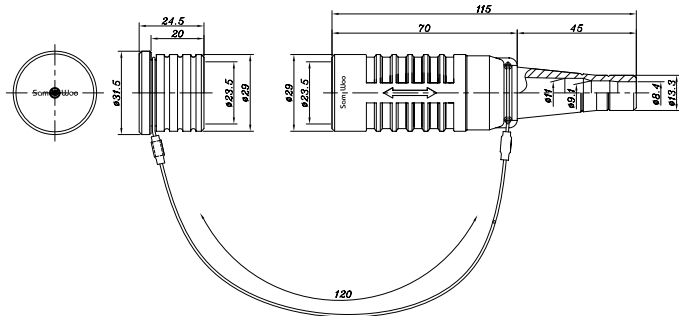
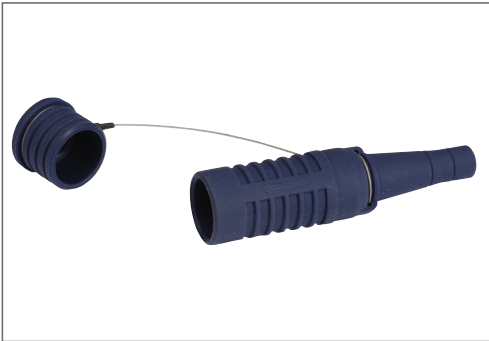
| Product Number | Diameter(φ) | | | | | | |
|-----------------------|-------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| SB-102P-0,81/3,7/9,5A | 6,3 | 6,6 | 7,5 | 9,8 | 9,0 | 9,8 | 9,5 |
| SB-102J-0,81/3,7/9,5A | | | | | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

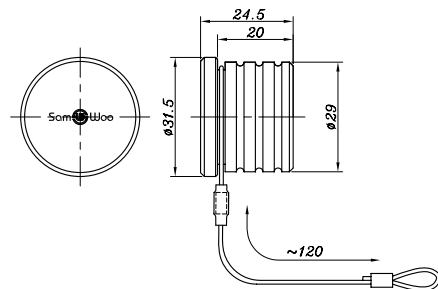
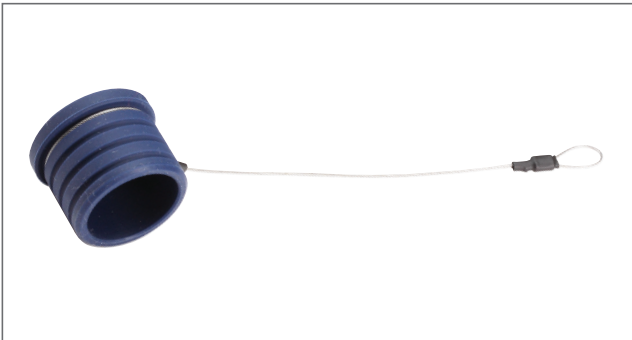
■ SB-101P BOOT



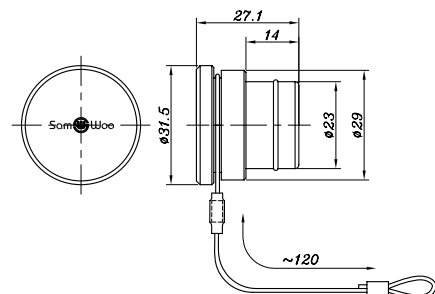
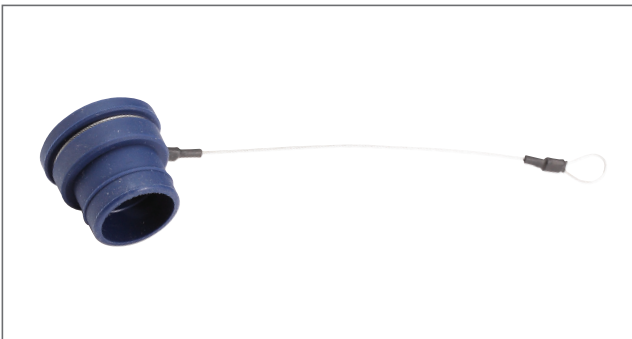
■ SB-101J BOOT



■ SB-101J CAP



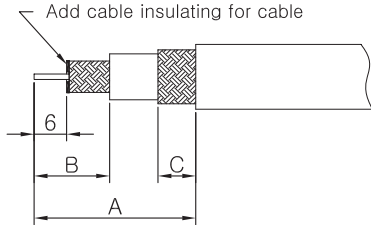
■ SB-101P CAP



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

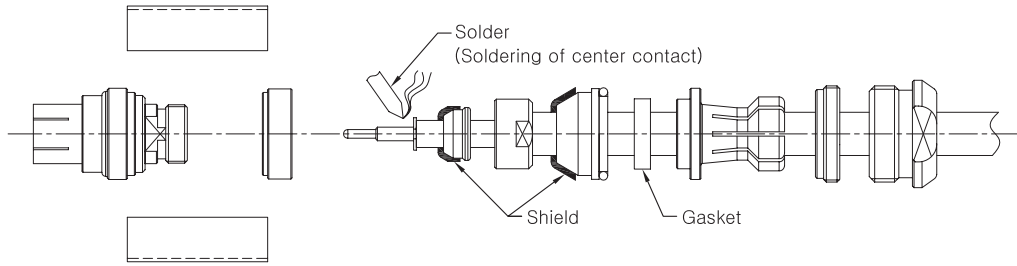
SB-101 Model (European Standard)

■ SB-101J & SB-101P

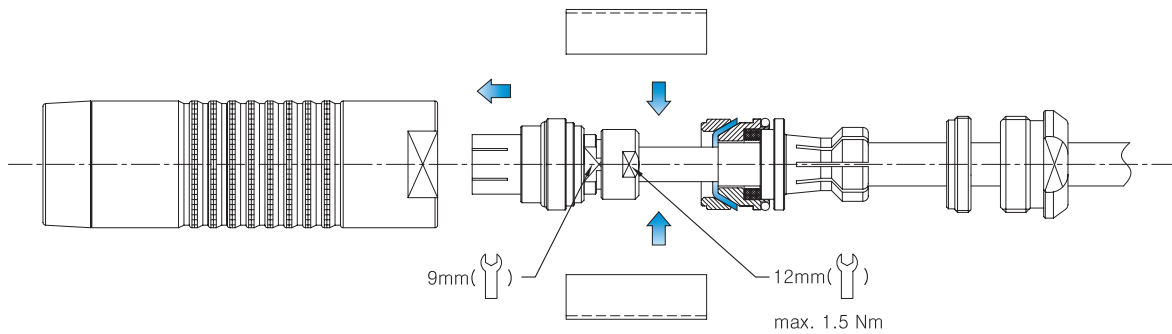


| REF. | A | B | C |
|----------------------------|----|----|---|
| SB-101P+SB-101J-1,0/4,5 | 24 | 14 | 7 |
| SB-101PFC+SB-101RC-1,0/4,5 | 25 | 14 | 7 |
| SB-101P+SB-101J-1,4/4,5 | 27 | 12 | 7 |
| SB-101PFC+SB-101RC-1,4/4,5 | 27 | 12 | 7 |
| SB-101P+SB-101J-1,4/6,6 | 27 | 13 | 5 |
| SB-101PFC+SB-101RC-1,4/4,6 | 27 | 13 | 5 |

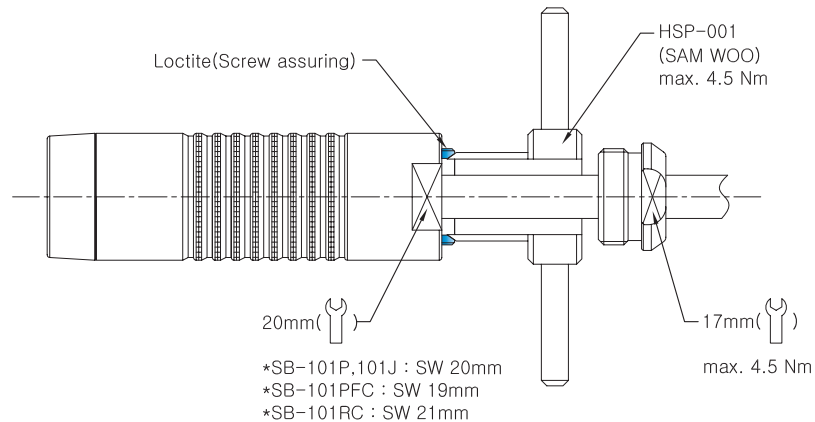
A



B



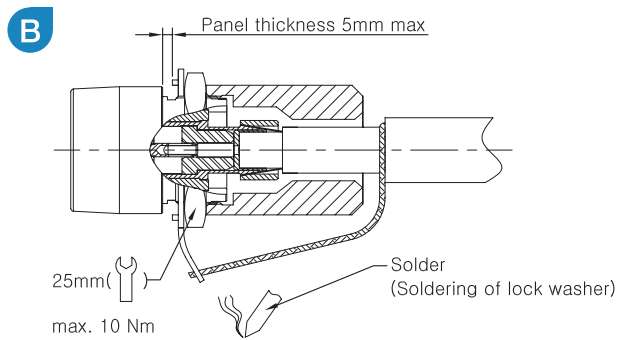
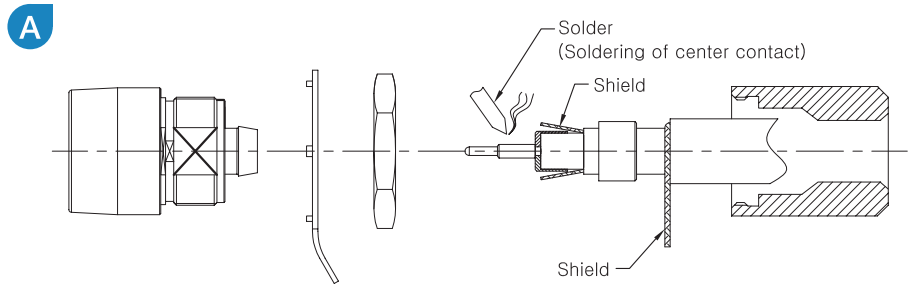
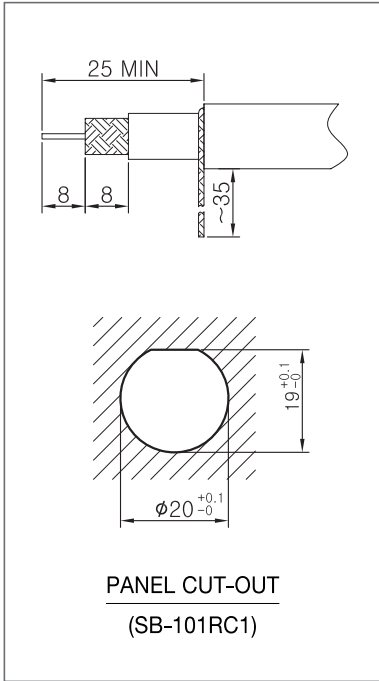
C



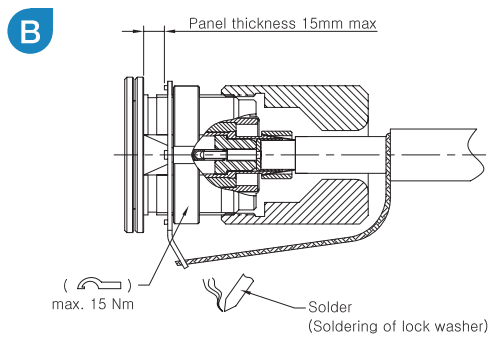
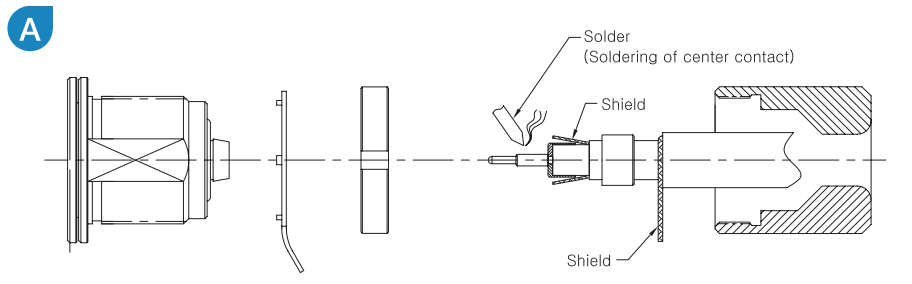
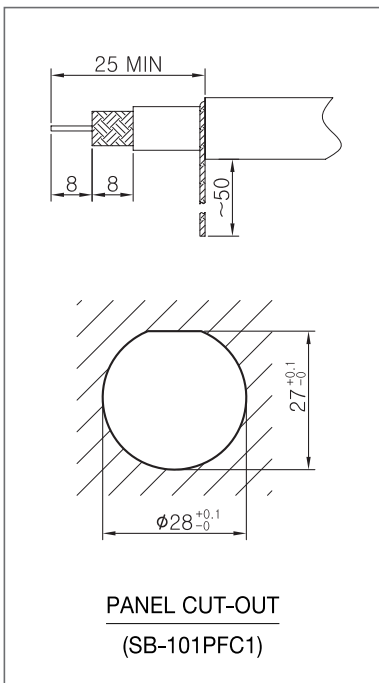
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SB-101 Model (European Standard)

■ **SB-101RC1**



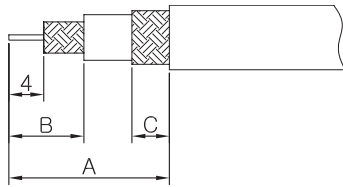
■ **SB-101PFC1**



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

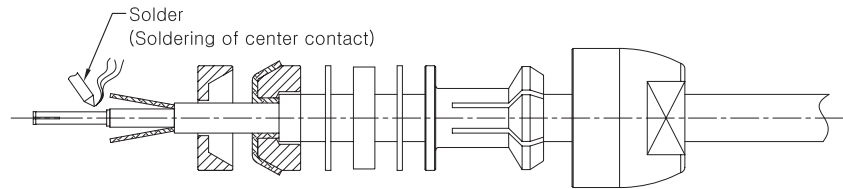
SB-102 Model (American Standard)

■ SB-102P & SB-102J

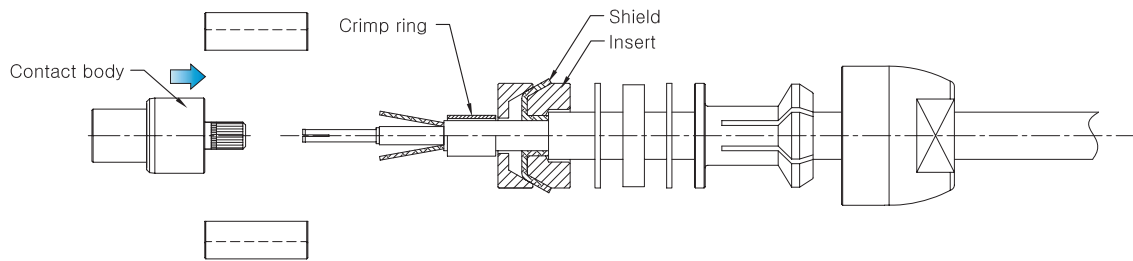


| REF. | A | B | C |
|----------------------|----|----|----|
| SB-102P-0,81/3,7/9,5 | 36 | 16 | 13 |
| SB-102J-0,81/3,7/9,5 | 36 | 16 | 13 |

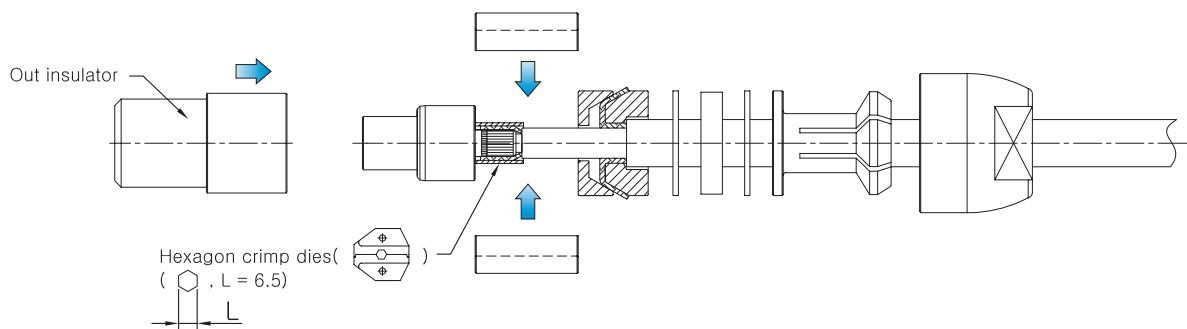
A



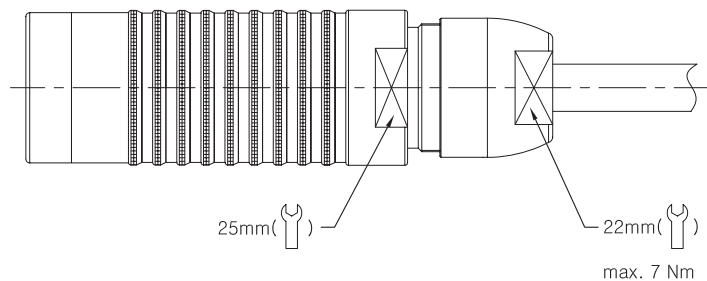
B



C



D



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



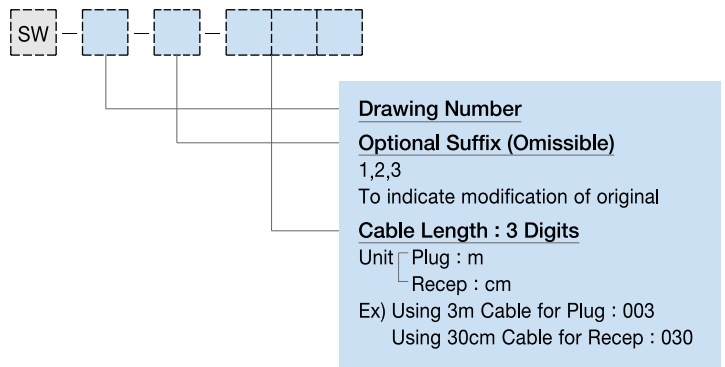
Features

- High performance
- Rigorous design
- Standard and Custom Design

Applications

- Professional TV Camera
- Broadcasting Industry

■ **Part Numbering**



■ **Plug Cable Assembly**



| Type | Construction |
|------|-------------------------------------|
| A | SB Connector + Cable + Housing |
| B | SB Connector + Cable + SB Connector |

※ Design and Customization Service Available

■ **Jack Cable Assembly**



| Type | Construction |
|------|--|
| A | SB Connector + Cable + open end |
| B | SB Connector + Cable + Housing |
| C | SB Connector + Cable + Housing with core |

※ Design and Customization Service Available

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

STEREO PLUG



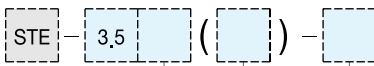
Features

- Screw Locking System
- Patented Design
- Easy Soldering
- Boot to fit cable diameter : $\varnothing 2,5$, $\varnothing 3,5$ or $\varnothing 4,5$

Applications

- Audio Signal Transmission
- Stereo Headphones
- Professional Headset Microphones

■ Stereo Plug Part Numbering



Body Color

Blank : Ni plating
B : Black plating

Body Type

P : Plug
PL : Right-angle plug
PM : Plug for molding

Variation

1 : Easy Mechanism for Repair

■ Electrical Performance

| | |
|---------------------|-----------------------------|
| Rated Current | Depends on Mating Connector |
| Contact Resistance | Depends on Mating Connector |
| Dielectric Strength | AC 500V for 10 seconds |

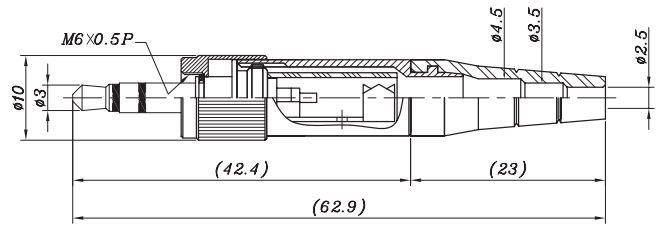
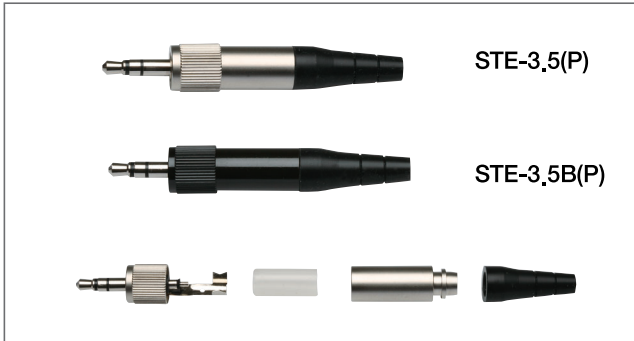
■ Mechanical Performance

| | |
|-----------------------|---|
| Mating Cycle | 5,000 |
| Solderability | Heat+270 \pm 5 $^{\circ}$ C for 2–3 seconds |
| Operating Temperature | –20 $^{\circ}$ C – +65 $^{\circ}$ C |

■ Material

| General | Material | Finish |
|---------------------|----------|--------------------------|
| Housing / Shell | Brass | Ni Plating |
| Insulation | POM | |
| Contacts | Brass | Ni Plating |
| Strain Relief-Crimp | Brass | Ni Plating |
| Boot | Silicon | Black, Red, Yellow, Grey |

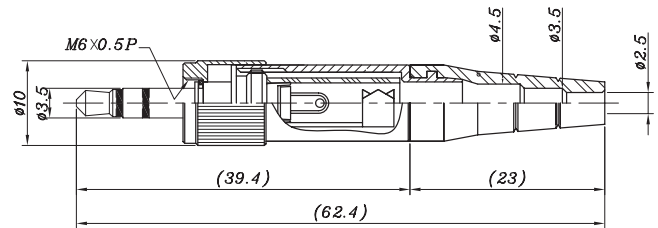
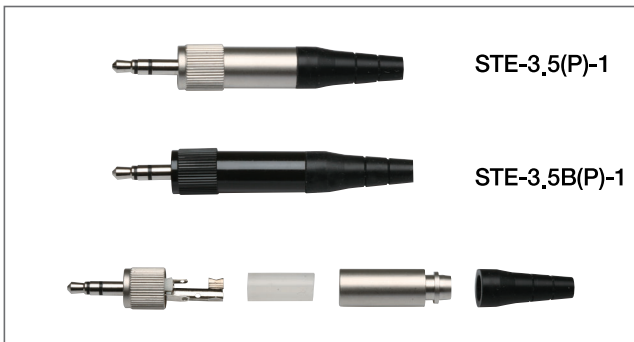
■ STE-3.5(P), STE-3.5B(P)



STE-3.5(P), STE-3.5B(P)

■ STE-3.5(P)-1, STE-3.5B(P)-1

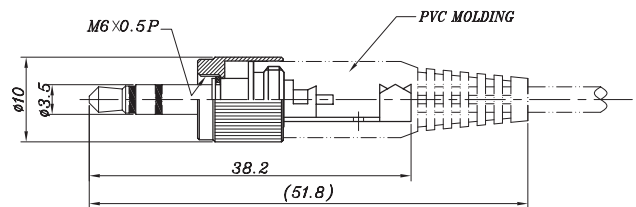
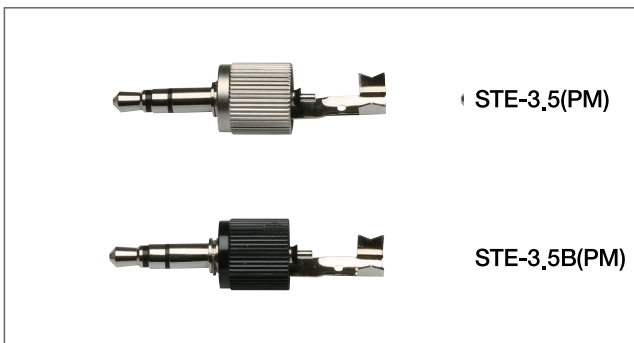
Easy Mechanism for Repair



STE-3.5(P)-1, STE-3.5B(P)-1

■ STE-3.5(PM), STE-3.5B(PM)

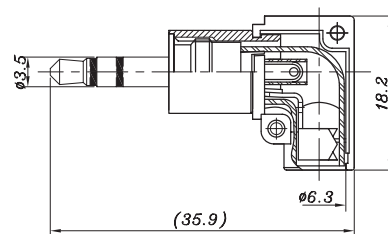
Molding Type



STE-3.5(PM), STE-3.5B(PM)

■ STE-3.5(PL), STE-3.5B(PL)

Right-angle Type



STE-3.5(PL), STE-3.5B(PL)

STEREO PLUG



Features

- Screw Locking System
- Patented Design
- Easy Soldering
- Boot to fit cable diameter : $\varnothing 2,5$, $\varnothing 3,5$ or $\varnothing 4,5$
- Standard and Custom Design

Applications

- Audio Signal Transmission
- Stereo Headphones
- Professional Headset Microphones

Part Numbering



Drawing Number
Optional Suffix (Omissible)
 1,2,3
 To indicate modification of original
Cable Length : 3 Digits
 Unit Plug : m
 Recep : cm
 Ex) Using 3m Cable for Plug : 003
 Using 30cm Cable for Recep : 030

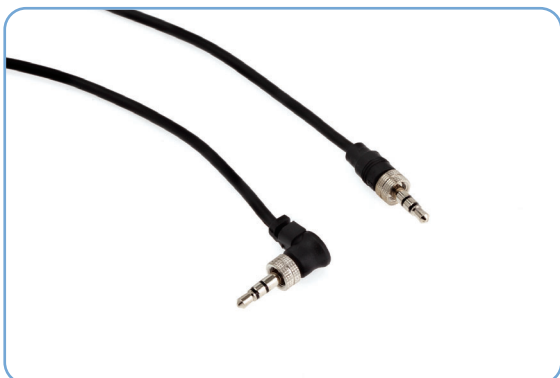
STE Cable Assembly with Coil Cable



| Type | Construction |
|------|---|
| A | STE Connecor + Coil CABLE + Other Connector |
| B | STE Connecor + Coil CABLE + SET Connector |

※ Design and Customization Service Available

STE Cable Assembly with Straight CABLE



| Type | Construction |
|------|--|
| A | STE Connector + Straight Cable + Open end |
| B | STE Connector + Straight Cable + Other Connector |
| C | STE Connector + Straight Cable + STE Connector |

※ Design and Customization Service Available

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.





SMA Features

- 18 GHz MIL-C-39012 SMA specifications
- High quality finish and optimum electrical properties
- Special version offers housing elements made of copper beryllium or stainless steel for higher mechanical strength
- Copper beryllium of the special version is gold plating, while stainless steel connectors are passivated
- SSMA also available.

SMB Features

- DC to 4GHz MIL-C-39012 SMB specifications
- Snap-on for rapid connection and disconnection

MCX Features

- Up to 2GHz MIL-C-39012 MCX specifications
- 30% less space than SMB
- Offers equal contact reliability as SMB

Major Performance

| | | | | | | | |
|----------|-----------------|-------------|------------|-----------------------|-----------------|--------|---------------|
| SMA | Impedance | 50 Ω | | Contact resistance | Center Contacts | 3,0m Ω | |
| | Frequency range | Semi-rigid | DC 18GHz | | Outer Contacts | 2,5m Ω | |
| | | Flexible | DC 12,4GHz | Insulation resistance | | | 500M Ω min |
| | Contact current | DC 2,0A max | | Insertion loss | | | 0,05 f(GHz)db |
| | Working voltage | Semi-rigid | 1000V | | V,S,W,R | | |
| Flexible | | 750V | | | | | |

| | | | | | | | | | |
|----------------|--------------------|-----------------|--------|-----------------------|--|-------------|--|-------------|-----------|
| SMB | Impedance | 50 Ω | | Insulation resistance | | 1000M Ω min | | | |
| | Frequency range | DC to 4GHz | | Insertion loss | | | | 0,6dB max | |
| | Contact current | DC 1,5A max | | V,S,W,R | | | | Straight | 1,3+0,04f |
| | Voltage rating | 250V R,M,S | | | | | | | |
| | Contact resistance | Center Contacts | 0,3m Ω | | | | | Right-angle | 1,4+0,06f |
| Outer Contacts | | 0,5m Ω | | | | | | | |

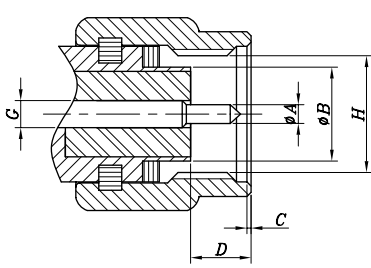
| | | | | | | | |
|-------------|-----------------|-------------|--|-----------------------|-----------------|--------|-------------|
| MCX | Impedance | 50 Ω | | Contact resistance | Center Contacts | 5,0m Ω | |
| | Frequency range | up to 2 GHz | | | Outer Contacts | 1,0m Ω | |
| | Contact current | DC 1,5A | | Insulation resistance | | | 1000M Ω min |
| | Voltage rating | 250V R,M,S | | V,S,W,R | | | Straight |
| Right-angle | | | | | | | 1,35 max |

Material Used / Finish

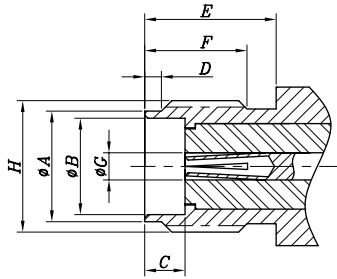
| General | | Material | Finish |
|-----------|--------|----------|--------------|
| Body | | Brass | Gold Plating |
| Insulator | | PTFE | White |
| Contacts | Male | Brass | Gold Plating |
| | Female | Brass | Gold Plating |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SMA Interface Dimensions



Plug



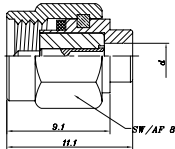
Jack

Interface Dimension

| SMA | Plug mm | | Jack mm | |
|-----|---------------|------|---------------|------|
| | min. | max. | min. | max. |
| Ø A | 0.9 | 0.94 | 5.28 | 5.49 |
| Ø B | | 4.59 | 4.59 | |
| C | 0.38 | 1.14 | 1.88 | 1.98 |
| D | | 3.43 | 0.38 | 1.14 |
| E | | | 5.54 | |
| F | | | 4.32 | |
| Ø G | 1.24 | 1.29 | 1.24 | 1.29 |
| H | 1/4-36 UNS-2B | | 1/4-36 UNS-2A | |

■ SMA Plugs

Straight - Semi-rigid Cable - Direct Solder

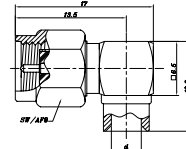


Product Number

SMA-P-402/U

SMA-P-405/U

Right-angle - Semi-rigid Cable - Direct Solder

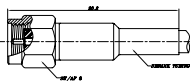


Product Number

SMA-LP-402/U

SMA-LP-405/U

Flexible Cable - Crimp



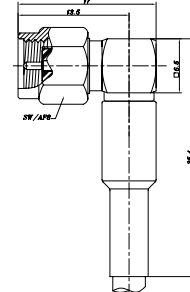
Product Number

SMA-PC-58/U

SMA-PC-178/U

SMA-PC-316/U

Right-angle - Semi-rigid Cable - Crimp



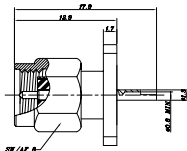
Product Number

SMA-LP-58/U

SMA-LP-178/U

SMA-LP-316/U

Fixed Plug - Flange - Solder Pot Terminated

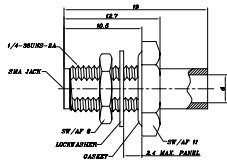


Product Number

SMA-PR

■ SMA Jacks

Bulkhead - Semi-rigid Cable - Direct Solder

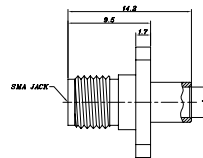


Product Number

SMA-BJR-402/U

SMA-BJR-405/U

Fixed Jack - Flange - Semi-rigid Cable - Direct Solder

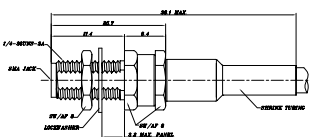


Product Number

SMA-JR-402/U

SMA-JR-405/U

Bulkhead - Flexible Cable - Crimp



Product Number

SMA-BJC-58/U

SMA-BJC-178/U

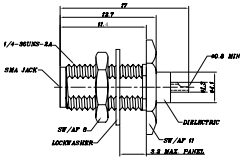
SMA-BJC-316/U

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SMA Series Miniature

SMA Receptacles

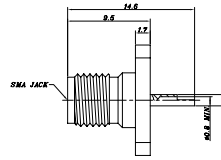
Bulkhead - Front Screw - Solder Pot Terminated



Product Number

SMA-JBR

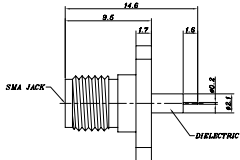
Flange - Flush Dielectric - Solder Pot Terminated



Product Number

SMA-JR

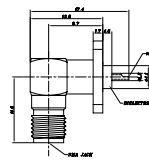
Flange - Extended Dielectric - Stub Terminated



Product Number

SMA-JR-PCB

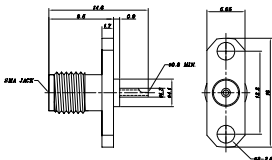
Right-angle - Flange - Extended Dielectric - Solder Pot Terminated



Product Number

SMA-LJR

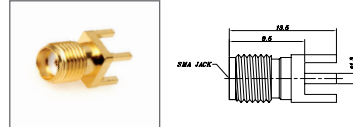
Narrow Flange - Extended Dielectric - Solder Pot Terminated



Product Number

SMA-J2R

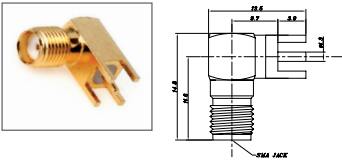
PCB Receptacle - 4 leg - Stub Terminated



Product Number

SMA-J4R-PCB

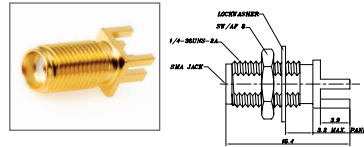
Right-angle - PCB Receptacle - 4 leg - Stub Terminated



Product Number

SMA-LJ4R-PCB

PCB Side-Mount Receptacle

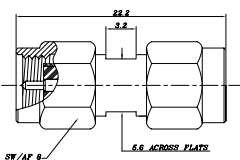


Product Number

SMA-BJ-4RPCB

SMA Adapters

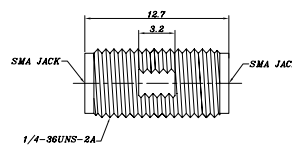
Plug-Plug



Product Number

SMA-A-PP

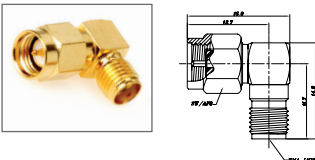
Jack-Jack



Product Number

SMA-A-JJ

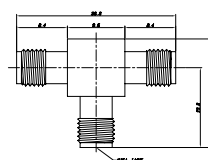
Right-angle - Plug-Jack



Product Number

SMA-LA-PJ

3 Way T-Adapters



Product Number

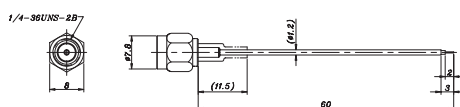
SMA-TA-JJJ

SMA-TA-JPJ

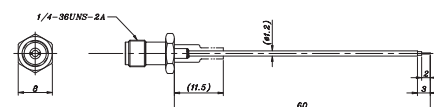
SMA-TA-PJP

SMA Cable Assembly

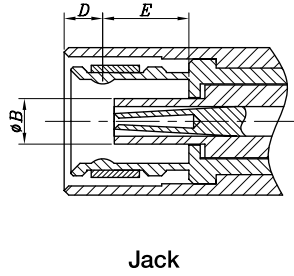
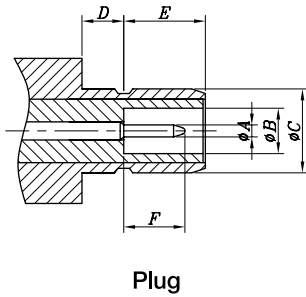
SMA-P-Semirigid-CA



SMA-J-Semirigid-CA



■ **SMB Interface Dimensions**

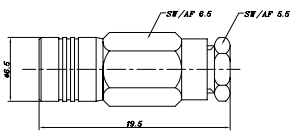


Interface Dimension

| SMB | Plug | | Jack | |
|----------|------|------|------|------|
| | min. | max. | min. | max. |
| ϕA | 0,48 | 0,53 | | |
| ϕB | 2,08 | | | 2,06 |
| ϕC | 3,66 | 3,71 | | |
| D | 1,65 | | | 1,63 |
| E | 3,33 | 3,58 | 3,58 | |
| F | | 2,97 | 2,97 | |

■ **SMB Jack**

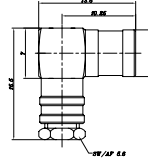
Flexible Cable - Clamp



Product Number

- SMB-J-58/U
- SMB-J-178/U
- SMB-J-316/U

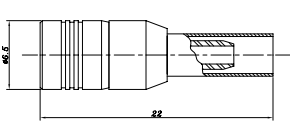
Right-angle - Flexible - Clamp



Product Number

- SMB-LJ-58/U
- SMB-LJ-178/U
- SMB-LJ-316/U

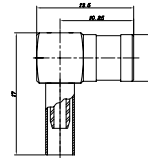
Flexible Cable - Crimp



Product Number

- SMB-JC-58/U
- SMB-JC-178/U
- SMB-JC-316/U

Right-angle - Flexible Cable - Crimp

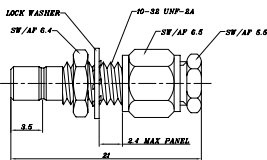


Product Number

- SMB-LJC-58/U
- SMB-LJC-178/U
- SMB-LJC-316/U

■ **SMB Plug**

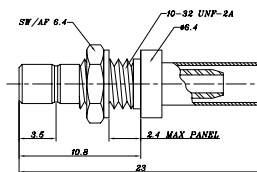
Bulkhead - Flexible - Clamp



Product Number

- SMB-BP-58/U
- SMB-BP-178/U
- SMB-BP-316/U

Bulkhead - Flexible Cable - Crimp

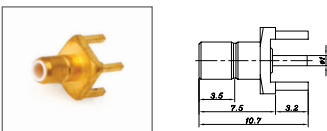


Product Number

- SMB-BPC-58/U
- SMB-BPC-178/U
- SMB-BPC-316/U

■ **SMB Receptacles**

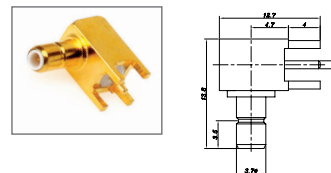
PCB Receptacle - 4 leg - Stub Terminated



Product Number

- SMB-J4R-PCB

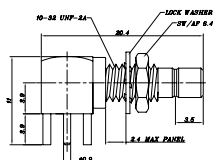
Right-angle - PCB Receptacle - 4 leg - Stub Terminated



Product Number

- SMB-LJ4R-PCB

Right-angle - Bulkhead - PCB Receptacle - 4 leg - Stub



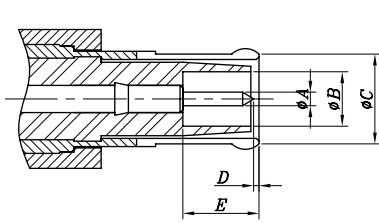
Product Number

- SMB-LB4R-PCB

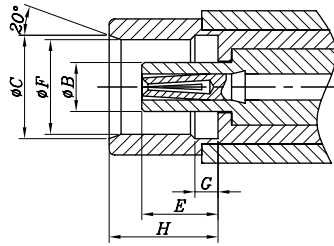
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

MCX Series Miniature

MCX Interface Dimensions



Plug



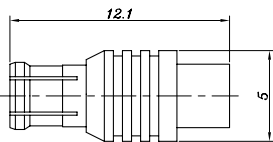
Jack

Interface Dimension

| MCX | Plug mm | | Jack mm | |
|----------|------------|------|------------|------|
| | min. | max. | min. | max. |
| ϕA | 0,48 | 0,53 | | |
| ϕB | 2 | | | 1,98 |
| ϕC | | 3,6 | 3,8 | |
| D | 0,15 | | | |
| E | 2,8 | | 2,6 | 2,8 |
| ϕF | | | 3,42 | 3,48 |
| G | | | 0,75 | 0,85 |
| H | | | 4 | 4,12 |

MCX Plugs

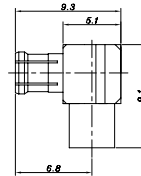
Semi-rigid - Direct Solder



Product Number

MCX-P-402/U
MCX-P-405/U

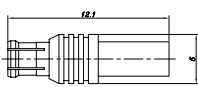
Right-angle - Semi-rigid - Direct Solder



Product Number

MCX-LP-402/U
MCX-LP-405/U

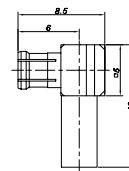
Flexible Cable - Crimp



Product Number

MCX-PC-58/U
MCX-PC-178/U
MCX-PC-316/U

Right-angle - Flexible Cable - Crimp

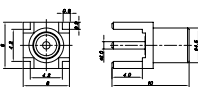


Product Number

MCX-LPC-58/U
MCX-LPC-178/U
MCX-LPC-316/U

MCX Terminator

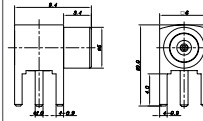
PCB Receptacle - 4 leg - Stub Terminated



Product Number

MCX-J4R-PCB

Right - angle - PCB Receptacle - 4 leg - Stub Terminated



Product Number

MCX-LJ4R-PCB



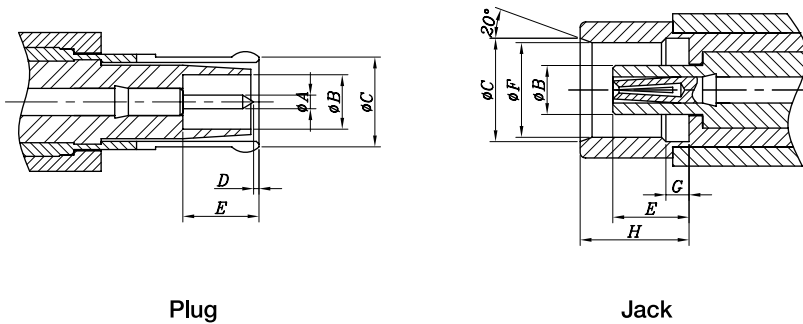
MMCX Series Sub Miniature



MMCX Features

- Up to 2GHz MIL-C-39012 MMCX specifications
- 50% less space than MCX
- Snap-on for rapid connection and disconnection

MMCX Interface Dimensions



Interface Dimension

| MMCX | Plug | | Jack | |
|------|------|------|------|------|
| | Min. | Max. | Min. | Max. |
| ∅ A | 0,38 | 0,42 | | |
| ∅ B | | | 0,7 | |
| ∅ C | 1,58 | 1,62 | 3 | 3,04 |
| ∅ D | | 2,4 | 2,41 | |
| E | 1,45 | | 2,88 | 2,9 |
| F | | | 0,9 | 1,2 |
| G | 2,8 | | 2,6 | |

MMCX Major Performance

| | | | | | |
|------|-----------------|------------|-----------------------|-----------------|--------|
| MMCX | Impedance | 50 Ω | Contact resistance | Center contacts | 5m Ω |
| | Frequency range | up to 2GHz | | Outer contacts | 2,5m Ω |
| | Contact current | DC 1A max. | Insulation resistance | 1000M Ω | |
| | Working voltage | 170V, 50Hz | V.S.W.R | Straight | 1,2Max |
| | | | | Right-angle | 1,3max |

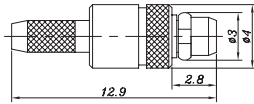
Material Used / Finish

| General | | Material | Finish |
|-----------|--------|----------|--------------|
| Body | | BRASS | Gold Plating |
| Insulator | | PTFE | White |
| Contacts | Male | BRASS | Gold Plating |
| | Female | BRASS | Gold Plating |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ **MMCX Plugs**

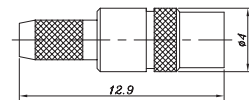
Flexible Cable - Crimp



Product Number

MMCX-PC-178/U

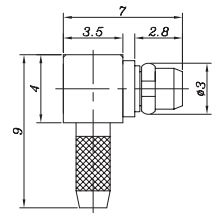
MMCX-PC-316/U



Product Number

MMCX-JC-316/U

Right - angle - Flexible Cable - Crimp



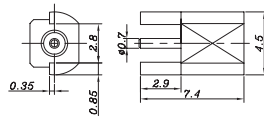
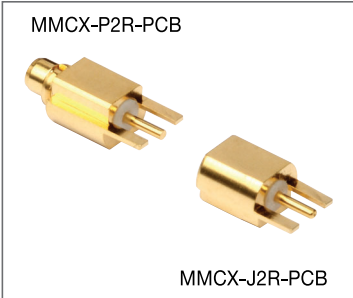
Product Number

MMCX-LPC-178/U

MMCX-LPC-316/U

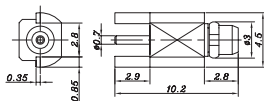
■ **MMCX Terminator**

PCB Receptacle - 2leg - Stub Terminated



Product Number

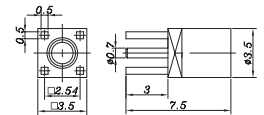
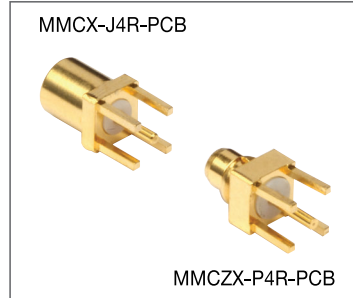
MMCX-J2R-PCB



Product Number

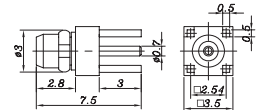
MMCX-P2R-PCB

PCB Receptacle - 4leg - Stub Terminated



Product Number

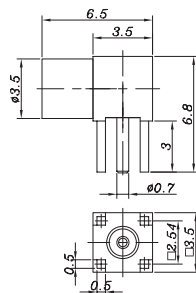
MMCX-J4R-PCB



Product Number

MMCX-P4R-PCB

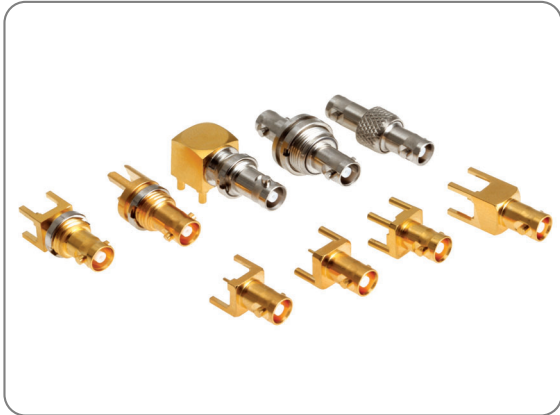
Right - angle - PCB Receptacle - 4 leg - Stub Terminated



Product Number

MMCX-LJ4R-PCB

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



Features

- Top-quality performing 75 Ω BNC
- High density
- Quick and reliable connection

Applications

- TV broadcasting
- CCTV
- CATV transmitters
- Telecommunications
- Computer networking
- Medical imaging equipment

■ **Part Numbering**

| Products | Product Number | Description | Impedance (Ohms) |
|----------|------------------|--|------------------|
| Jack | BNCCHD-J3R-PCB | HD-BNC PCB Jack, Straight-3Legs | 75 Ω |
| | BNCCHD-J3R1-PCB | HD-BNC PCB Jack, Straight-3Legs | |
| | BNCCHD-J4R-PCB | HD-BNC PCB Jack, Straight | |
| | BNCCHD-J4R1-PCB | HD-BNC PCB Jack, Straight | |
| | BNCCHD-BJ4R-PCB | HD-BNC PCB Jack, Straight, Bulkhead | |
| | BNCCHD-BJ3RE-PCB | HD-BNC PCB Jack, Straight, Bulkhead | |
| | BNCCHD-LBJ4R-PCB | HD-BNC PCB Jack, Right-angle, Bulkhead | |
| Adapter | BNCCHD-A-JJ | HD-BNC Jack to HD-BNC Jack | 75 Ω |
| | BNCCHD-BA-JJ | HD-BNC Jack to HD-BNC Jack, Isolated, Bulkhead | |

■ **Major Performances**

| | | | | |
|---------------------------------|--------------|-----------------------|----------------|------------|
| Impedance (Ohms) | 75 Ω | Insulation resistance | 10,000M Ω min | |
| Frequency range | DC-3GHz | Contact resistance | Center Contact | 5m Ω Max |
| Voltage rating | 170V | | Outer Contact | 2,5m Ω Max |
| Dielectric withstanding voltage | 500 VRMS | V.S.W.R | Straight | 1,2 |
| | | | Right-angle | 1,2 |
| Mating | Bayonet type | Durability | 500 cycle | |

■ **Material Used / Finish**

| General | Material | Finish |
|-----------|----------|--------------------|
| Body | Brass | Ni or Gold Plating |
| Insulator | PTFE | White |
| Contacts | Male | Gold Plating |
| | Female | Cu-Be |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ BNCCHD JACK

| Product Number | Picture | Drawing | Panel hole layout | PCB hole layout |
|-----------------|---------|---------|-------------------|-----------------|
| BNCCHD-J3R-PCB | | | | |
| BNCCHD-J3R1-PCB | | | | |
| BNCCHD-J4R-PCB | | | | |
| BNCCHD-J4R1-PCB | | | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ BNCCHD JACK

| Product Number | Picture | Drawing | Panel hole layout | PCB hole layout |
|------------------|---------|---------|-------------------|-----------------|
| BNCCHD-BJ4R-PCB | | | | |
| BNCCHD-BJ3RE-PCB | | | | |
| BNCCHD-LBJ4R-PCB | | | | |

■ BNCCHD ADAPTER

| Product Number | Picture | Drawing |
|----------------|---------|---------|
| BNCCHD-A-JJ | | |
| BNCCHD-BA-JJ | | |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.





Features

- Top-quality performing 75 Ω BNC
- Quick, reliable connection
- Intermateable with 50 Ω series

Applications

- TV broadcasting
- CCTV
- Satellite receivers
- Medical imaging equipment, etc.
- CATV transmitters
- Telecommunications
- Computer networking

■ BNC Part Numbering (plug & adapter)



Connector Series
BNCC-BNC 75 Ω series

Body Type
PC : Plug (crimp type) AJJ : Adapter (jack-jack)
APJ : Adapter (plug-jack) APP : Adapter (plug-plug)

Cable code

| Code | Cable in use |
|---------|----------------------|
| 1,5C | 1,5C 2V |
| 2,5C | 2,5C 2V |
| 3C | 3C 2V |
| 5C | 5C 2V |
| 6CHF | 6CHFB |
| 7C | 7C 2V |
| 7CHF | 7CHF |
| 6 | RG6/U |
| 59U | RG59/U, Belden 1505A |
| 179U | RG179/U |
| 1855A | Belden 1855A |
| VK2 | Percon VK2 |
| VK5/6,0 | Percon VK5/0,6 |
| VK6/0,8 | Percon VK6/0,8 |
| VK7/1,0 | Percon VK7/1,0 |
| VK95 | Percon VK95 |

Frequency
1 : 1GHz 3 : 3GHz

Boot Color Code

| | | |
|-------------|------------|-------------|
| BK - Black | BU - Blue | BR - Brown |
| GY - Gray | GN - Green | OR - Orange |
| PR - Purple | RD - Red | WH - White |
| YE - Yellow | | |

Boot Code
01 : RG - 179, 1,5C 2V
02 : 2,5C 2V, 3C 2V
03 : 1505A, RG - 59/U

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

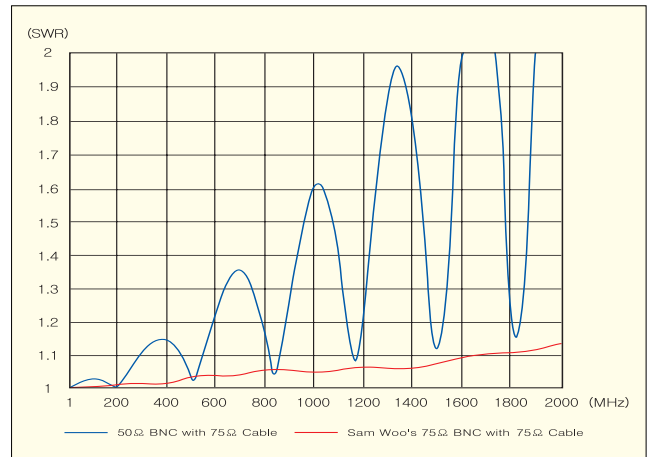
■ Major Performance

| | | | | |
|---------------------------------|------------------|-----------------------|----------------|------------|
| Impedance | 75 Ω | Insulation resistance | 5,000MΩ | |
| Frequency range | 0~3 GHz | Contact resistance | Center Contact | 3,5m Ω max |
| Voltage rating | 500V R,M,S | | Outer Contact | 2,5m Ω max |
| Dielectric withstanding voltage | 1,500V@sea level | V,S,W,R | <1,2 | |

■ BNC 75 Ω Advantage

Why use BNC 75 Ω Connectors?

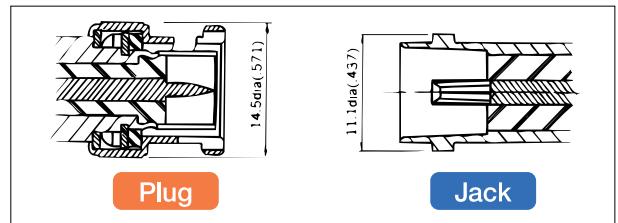
The 50 Ω BNC connector that terminates to the 75 Ω video coax is not sufficient in producing maximum performance for today's high analog and digital transmission, causing a mismatch that results in signal degradation and reduction in picture quality. The data on the right shows that the 75 Ω connectors outperform the 50 Ω in terms of VSWR. Thirty-centimeter long cables with both BNC ends are used to generate the data.



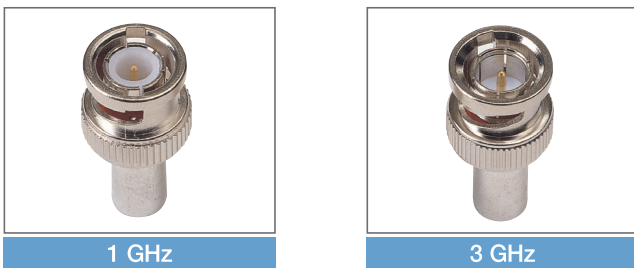
■ Material Used / Finish

| General | | Material | Finish |
|-----------|--------|---------------------|--------------|
| Body | | Zinc alloy or Brass | Ni plating |
| Insulator | | PTFE | White |
| Contacts | Male | Brass | Gold plating |
| | Female | Beryllium copper | Gold plating |

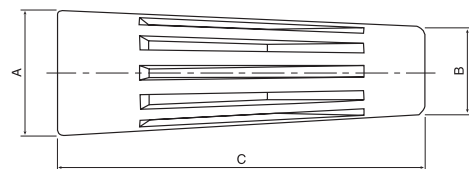
■ Interface Dimension



■ 1GHz and 3GHz Compared



■ Boot Dimension / Part Numbering(for boot only)

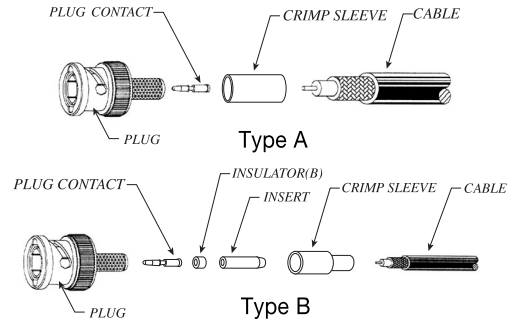
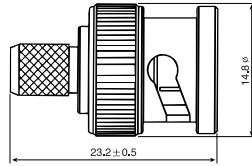


| Model | Cable | ∅ A | ∅ B | C |
|--------------|-------------------|------|-----|----|
| BNC-color 01 | RG-179/U, 1,5C 2V | 12,5 | 5,5 | 28 |
| BNC-color 02 | 2,5C 2V, 3C 2V | 12,5 | 6 | 32 |
| BNC-color 03 | 1505A, RG-59/U | 12,5 | 8,5 | 36 |

- ↓
Color Code
 BK - Black BU - Blue BR - Brown
 GY - Grey GN - Green OR - Orange
 PR - Purple RD - Red WH - White
 YE - Yellow

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

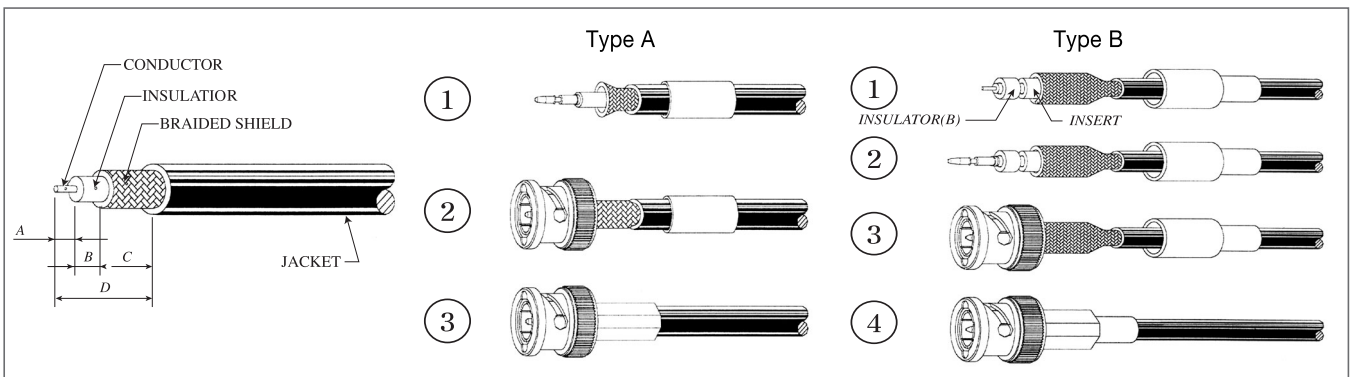
■ **BNC Plugs**



| No. | Product Number | Cable Type | Frequency | Cable Stripping(mm) | | | | Assembly Type |
|-----|-------------------|----------------------|-----------|---------------------|-----|---|----|---------------|
| | | | | A | B | C | D | |
| 1 | BNCC-PC-1,5C-1 | 1,5C 2V | 1 | 3,5 | 5,5 | 8 | 17 | B |
| 2 | BNCC-PC-2,5C-1 | 2,5C 2V | 1 | 3,5 | 5,5 | 7 | 16 | A |
| 3 | BNCC-PC-3C-1 | 3C 2V | 1 | 3,5 | 5,5 | 7 | 16 | A |
| 4 | BNCC-PC-5C-1 | 5C 2V | 1 | 3 | 4 | 8 | 15 | A |
| 5 | BNCC-PC-6CHF-1 | 6CHFB | 1 | 3,5 | 3,5 | 9 | 16 | A |
| 6 | BNCC-PC-7C-1 | 7C 2V | 1 | | | | | |
| 7 | BNCC-PC-7CHF-1 | 7CHF | 1 | 3,5 | 3,5 | 9 | 16 | A |
| 8 | BNCC-PC-6-1 | RG6/U | 1 | | | | | |
| 9 | BNCC-PC-59U-1 | RG59/U, Belden 1505A | 1 | 3,5 | 5,5 | 7 | 16 | A |
| 10 | BNCC-PC-179U-1 | RG179/U | 1 | 3,5 | 5,5 | 8 | 17 | B |
| 11 | BNCC-PC-1,5C-3 | 1,5C 2V | 3 | 3 | 4 | 8 | 15 | B |
| 12 | BNCC-PC-2,5C-3 | 2,5C 2V | 3 | 3 | 4 | 7 | 14 | A |
| 13 | BNCC-PC-3C-3 | 3C 2V | 3 | 3 | 4 | 7 | 14 | A |
| 14 | BNCC-PC-5C-3 | 5C 2V | 3 | | | | | |
| 15 | BNCC-PC-6CHF-3 | 6CHFB | 3 | 3 | 3 | 9 | 15 | A |
| 16 | BNCC-PC-7CHF-3 | 7CHF | 3 | 3 | 3 | 9 | 15 | A |
| 17 | BNCC-PC-59U-3 | RG59/U, Belden 1505A | 3 | 3 | 3 | 9 | 15 | B |
| 18 | BNCC-PC-179U-3 | RG179/U | 3 | 3 | 4 | 8 | 15 | B |
| 19 | BNCC-PC-1855A-3 | Belden 1855A | 3 | 3 | 3 | 9 | 15 | A |
| 20 | BNCC-PC-VK2-4 | Percon VK2 | 3 | 3 | 4 | 7 | 14 | B |
| 21 | BNCC-PC-VK5/0,6-3 | Percon VK5/0,6 | 3 | 3 | 4 | 7 | 14 | A |
| 22 | BNCC-PC-VK6/0,8-3 | Percon VK6/0,8 | 3 | 3 | 4 | 7 | 14 | A |
| 23 | BNCC-PC-VK7/1,0-3 | Percon VK7/1,0 | 3 | 3 | 4 | 7 | 14 | A |
| 24 | BNCC-PC-VK9-3 | Percon VK9 | 3 | 3 | 4 | 7 | 14 | A |

■ **Cable Assembly Instruction**

- Use above cable stripping dimensions



■ Crimp Tools



Sam Woo Tool (SW-HT)



Tool Die



Canare Tool (TC-1)

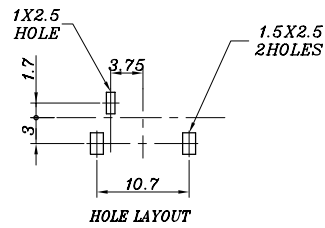
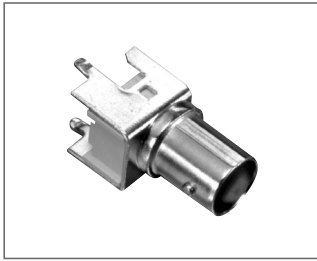
| Tool | Color of Handles | Tool Die | 5.87 | | 1.36 | | 6.48 | | 1.59 | | 5.41 | |
|-------|------------------|----------|------|---|------|---|-------|--|------|--|------|--|
| | | | A | B | C | D | E | | | | | |
| SW-HT | Red | HTD-02 | | | | | | | | | | |
| TC-1 | Blue | TCD-5CFB | | | | | 8,05 | | 1,2 | | | |
| | | TCD-7CA | | | | | 10,23 | | 1,93 | | | |

| No. | Product Number | Cable Type | Die Spec(mm) | | | | | Tool | Tool Die | Tool Maker |
|-----|-------------------|----------------------|--------------|---|---|---------|---|-------|----------|------------|
| | | | Sleeve | | | Contact | | | | |
| | | | A | C | E | B | D | | | |
| 1 | BNCC-PC-1,5C-1 | 1,5C 2V | | | ● | ● | | SW-HT | HTD-02 | Sam Woo |
| 2 | BNCC-PC-2,5C-1 | 2,5C 2V | ● | | | ● | | SW-HT | HTD-02 | Sam Woo |
| 3 | BNCC-PC-3C-1 | 3C 2V | ● | | | ● | | SW-HT | HTD-02 | Sam Woo |
| 4 | BNCC-PC-5C-1 | 5C 2V | | ● | | ● | | | | |
| 5 | BNCC-PC-6CHF-1 | 6CHF B | | ● | | ● | | TC-1 | TCD-7CA | Canare |
| 6 | BNCC-PC-7C-1 | 7C 2V | | | | | | | | |
| 7 | BNCC-PC-7CHF-1 | 7CHF | | ● | | | ● | TC-1 | TCD-7CA | Canare |
| 8 | BNCC-PC-6-1 | RG6/U | | | | | | | | |
| 9 | BNCC-PC-59U-1 | RG59/U, Belden 1505A | | ● | | | ● | SW-HT | HTD-02 | Sam Woo |
| 10 | BNCC-PC-179U-1 | RG179/U | | | ● | ● | | SW-HT | HTD-02 | Sam Woo |
| 11 | BNCC-PC-1,5C-3 | 1,5C 2V | | | ● | ● | | SW-HT | HTD-02 | Sam Woo |
| 12 | BNCC-PC-2,5C-3 | 2,5C 2V | ● | | | ● | | SW-HT | HTD-02 | Sam Woo |
| 13 | BNCC-PC-3C-3 | 3C 2V | ● | | | ● | | SW-HT | HTD-02 | Sam Woo |
| 14 | BNCC-PC-5C-3 | 5C 2V | | | | | | | | |
| 15 | BNCC-PC-6CHF-3 | 6CHF B | | ● | | | ● | TC-1 | TCD-7CA | Canare |
| 16 | BNCC-PC-7CHF-3 | 7CHF | | ● | | | ● | TC-1 | TCD-7CA | Canare |
| 17 | BNCC-PC-59U-3 | RG59/U, Belden 1505A | | ● | | | ● | SW-HT | HTD-02 | Sam Woo |
| 18 | BNCC-PC-179U-3 | RG179/U | | | ● | ● | | SW-HT | HTD-02 | Sam Woo |
| 19 | BNCC-PC-1855A-3 | Belden 1855A | | ● | | ● | | SW-HT | HTD-02 | Sam Woo |
| 20 | BNCC-PC-VK2-4 | Percon VK2 | | | ● | ● | | SW-HT | HTD-02 | Sam Woo |
| 21 | BNCC-PC-VK5/0,6-3 | Percon VK5/0,6 | | | ● | ● | | SW-HT | HTD-02 | Sam Woo |
| 22 | BNCC-PC-VK6/0,8-3 | Percon VK6/0,8 | | | ● | ● | | SW-HT | HTD-02 | Sam Woo |
| 23 | BNCC-PC-VK7/1,0-3 | Percon VK7/1,0 | | ● | | ● | | TC-1 | TCD-5CFB | Canare |
| 24 | BNCC-PC-VK9-3 | Percon VK9 | | ● | | ● | | TC-1 | TCD-5CFB | Canare |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

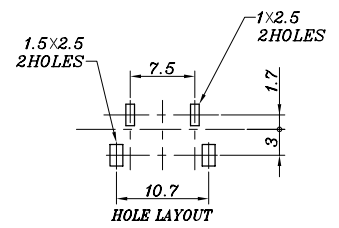
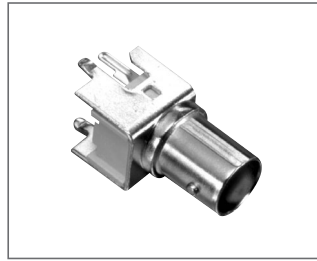
■ **BNC Receptacles**

SW-2497B-PCB



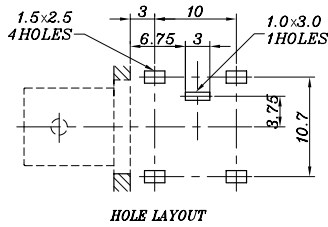
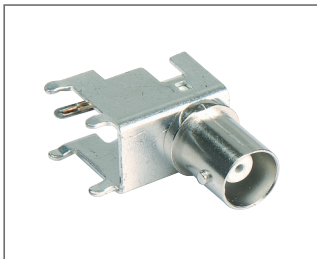
Vertical w/o Switch

SW-2520B-PCB



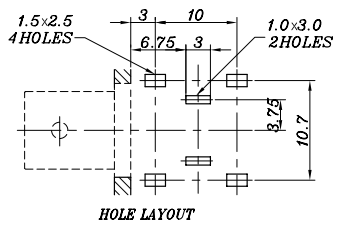
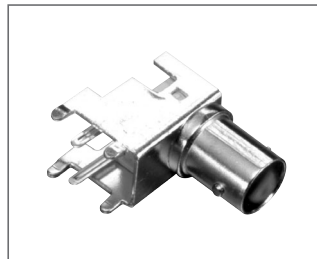
Vertical with Switch

SW-2639B-LPCB



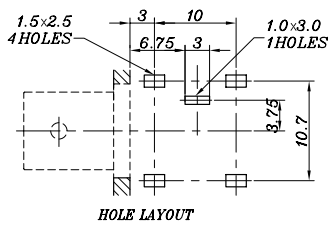
Horizontal w/o Switch

SW-2521B-LPCB



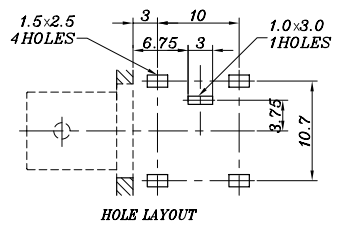
Horizontal with Switch

SW-2635B-LPCB



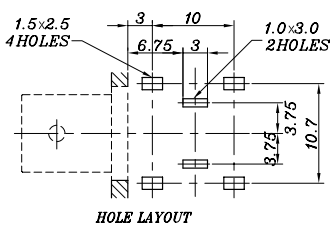
Horizontal w/o Switch (Short)

SW-2645B-LPCB



Horizontal w/o Switch (Short, Brass)

SW-2584B-LPCB



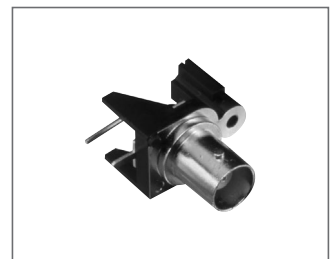
Horizontal with Switch (Short)

BNC-RB-2P



Bulkhead with Switch

BNC-PCL



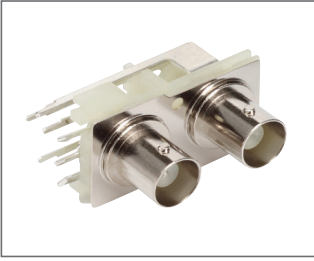
Horizontal w/o Switch

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

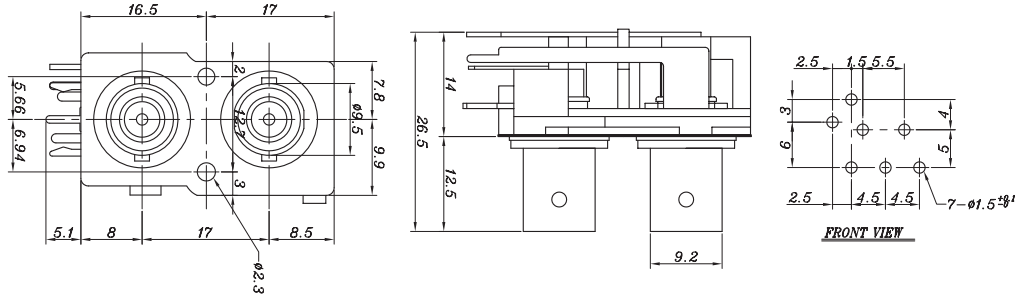
■ BNC Receptacles

With Switches

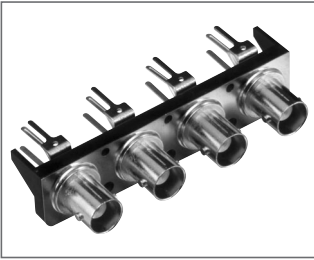
BNC2-P/B



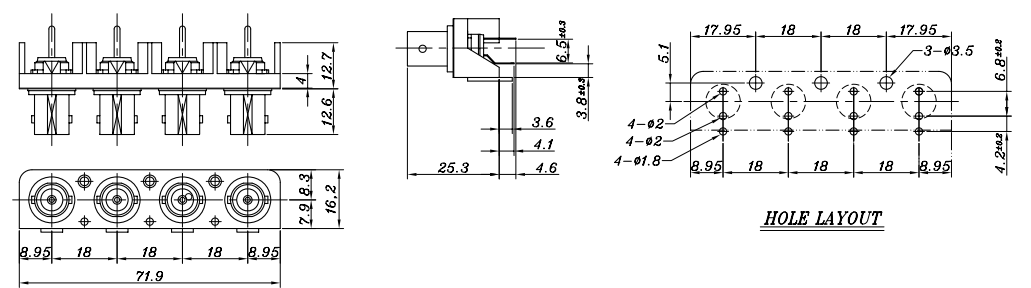
Vertical with 2 Switches



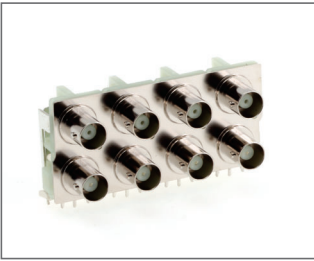
BNC4-P/B



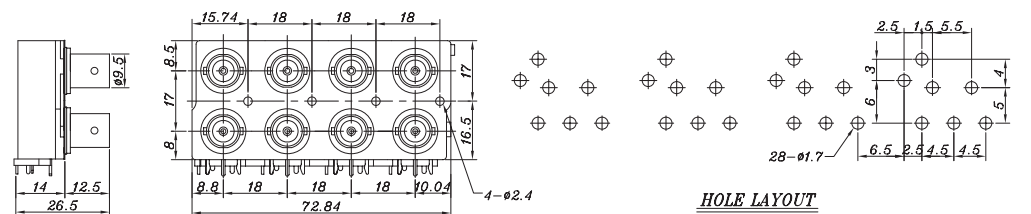
Vertical with 4 Switches



BNC8-P/B



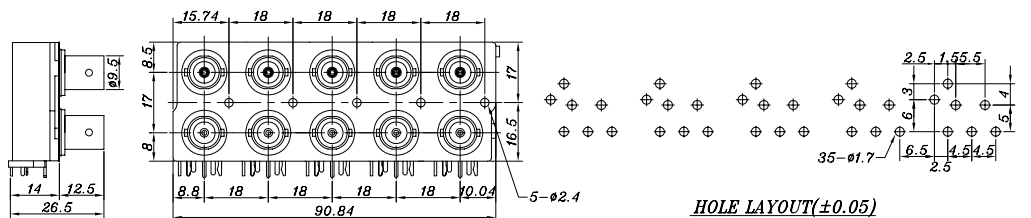
Vertical with 8 Switches



BNC10-P/B



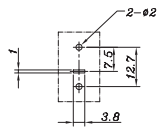
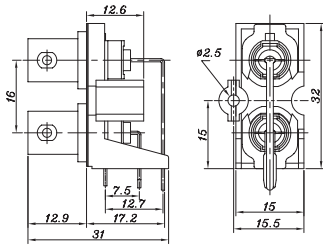
Vertical with 10 Switches



Without Switches

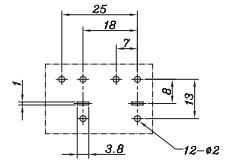
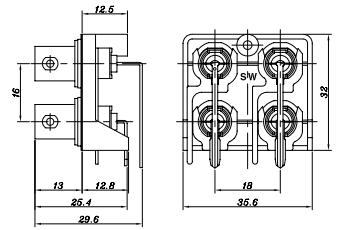
■ **BNC Receptacles**

BNC2-P/B (N/S)



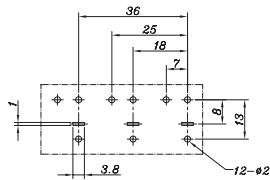
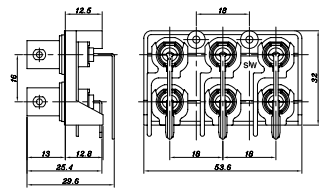
Front View

BNC4-P/B (N/S)



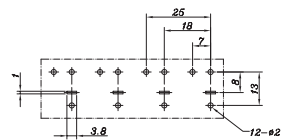
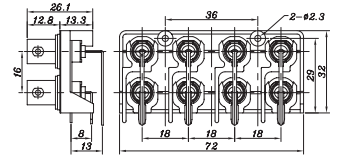
Front View

BNC6-P/B (N/S)



Front View

BNC8-P/B (N/S)



Front View

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

Up to 3GHz

Major Performance

| Product Number | Description | Stud position | Panel Mount | V,S,W,R |
|----------------|-----------------------|---------------|-------------------------------|--|
| BNCC-JPR-LPCB | Right angle | Horizontal | Front : M2,6 screw | Up to 1GHz : 1,1 or less Up to 3GHz : 1,2 or less |
| BNCC-2JPR-LPCB | Right angle,Dual Jack | Horizontal | Front : M2,6 screw | Up to 1GHz : 1,1 or less Up to 2,5GHz : 1,2 or less |
| BNCC-JBR-LPCB | Right angle,Low-cost | Vertical | Front : Hex nut & lock washer | Up to 1GHz : 1,1 or less Up to 2,5GHz : 1,2 or less |

75 Ω BNC PCB Mount Receptacle Screw type

| Product Number | Picture | Drawing | Panel hole layout | PCB hole layout |
|----------------|---------|---------|----------------------------|----------------------------|
| BNCC-JPR-LPCB | | | Screw M2,6 t:1,6mm max | Screw M2,6 t:2,0mm max |
| BNCC-2JPR-LPCB | | | Screw M2,6 t:1,6mm max | Screw M2,6 t:1,6mm max |

75 Ω BNC PCB Mount Receptacle Hexagonal Nut type

| Product Number | Picture | Drawing | Panel hole layout | PCB hole layout |
|----------------|---------|---------|-------------------|-----------------|
| BNCC-JBR-LPCB | | | | t:2,0mm max |

* Note : Please avoid any cleaning soldering. This occurs to insulation problem.

BNC 50 Ω , N, M, TNC, Series



BNC 50 Ω , N, M, TNC, Features

- High quality Sam Woo medium-size coaxial connectors provide best performance for various applications.
- 75 Ω products available upon request.

Adapter Basic Features

- Between-series adapter,
 - BNC-N
 - BNC-SMA
 - N-M
 - N-TNC
 - BNC-M
 - BNC-TNC
 - N-SMA
- Other Types available upon request.

Major Performance

| | | | | | | | |
|-----------------|--------------------|-----------------|------------|-----------------------|-----------------------|------------------|-----------|
| BNC 50 Ω | Impedance | 50 Ω | | Contact resistance | Center Contacts | 3,0m Ω | |
| | Frequency range | Semi-rigid | DC 18GHz | | Insulation resistance | 5000M Ω min | |
| | | Flexible | DC 12,4GHz | Insertion loss | | 0,05 f(GHz)db | |
| | Contact current | DC 2,0A max | | | V,S,W,R | <1,15+0,02f(GHz) | |
| Working voltage | Semi-rigid | 1000V | | | | | |
| | Flexible | 750V | | | | | |
| N | Impedance | 50 Ω | | Insulation resistance | 1000M Ω min | | |
| | Frequency range | DC to 4GHz | | | Insertion loss | 0,6dB max | |
| | Contact current | DC 1,5A max | | V,S,W,R | | Straight | 1,3+0,04f |
| | Voltage rating | 250V R,M,S | | | Right-angle | 1,4+0,06f | |
| | Contact resistance | Center Contacts | 0,3m Ω | | | | |
| Outer Contacts | | 0,5m Ω | | | | | |
| M | Impedance | 50 Ω | | Contact resistance | Center Contacts | 5m Ω | |
| | Frequency range | up to 2 GHz | | | Outer Contacts | 1m Ω | |
| | Contact current | DC 1,5A | | Insulation resistance | 1000M Ω min | | |
| | Voltage rating | 250V R,M,S | | | V,S,W,R | Straight | 1,3 max |
| | | | | Right-angle | | 1,35 max | |
| TNC | Impedance | 50 Ω | | Contact resistance | Center Contacts | 5m Ω | |
| | Frequency range | up to 2 GHz | | | Outer Contacts | 1m Ω | |
| | Contact current | DC 1,5A | | Insulation resistance | 1000M Ω min | | |
| | Voltage rating | 250V R,M,S | | | V,S,W,R | Straight | 1,3 max |
| | | | | Right-angle | | 1,35 max | |

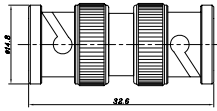
Material Used / Finish

| General | Material | Finish |
|-----------|---------------------|--------------|
| Body | Zinc alloy or Brass | Ni plating |
| Insulator | PTFE | White |
| Contacts | Male | Brass |
| | Female | Brass |
| | | Gold plating |
| | | Gold plating |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Adapters

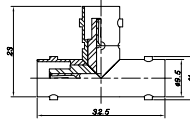
Plug - Plug Adapter



Product Number

BNC-A-PP

Jack - Jack - Jack Adapter



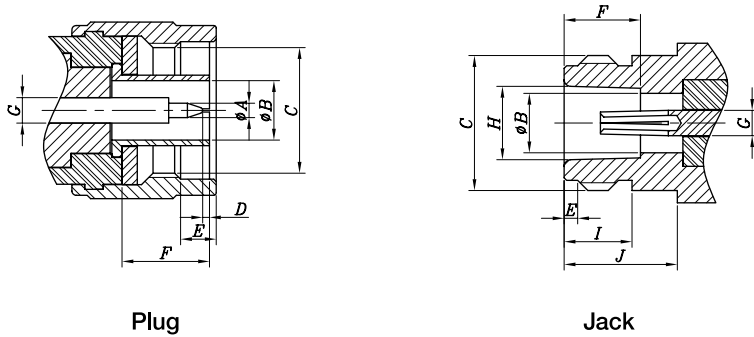
Product Number

BNC-TA-JJJ



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ N Interface Dimensions

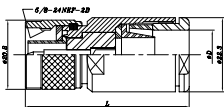


Interface Dimension

| N | Plug | | Jack | |
|----------|----------------|-------|----------------|------|
| | mm | | mm | |
| | min. | max. | min. | max. |
| ϕA | 1,6 | 1,676 | | |
| ϕB | 7 | | | 7,06 |
| C | 5/8-24 UNEF-2B | | 5/8-24 UNEF-2A | |
| D | 0 | 1,57 | | |
| E | 4,013 | 4,267 | 1,19 | 1,96 |
| F | 9,25 | | 9,05 | 9,19 |
| G | 3,04 | | 3,04 | |
| H | | | 8,54 | 8,74 |
| I | | | 6,76 | |
| J | | | 10,72 | |

■ N Plugs

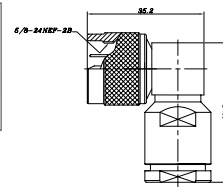
Straight (Clamp)



Product Number

N-P-3
 N-P-5
 N-P-7
 N-P-8/U
 N-P-10
 N-P-14/U
 N-P-17/U
 N-P-58/U
 N-P-59/U

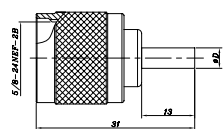
Right-angle (Clamp)



Product Number

N-LP-8/U
 N-LP-58/U
 N-LP-59/U

Straight (Crimp)

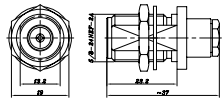


Product Number

N-PC-58/U
 N-PC-59/U
 N-PC-178/U
 N-PC-316/U

■ N Jacks

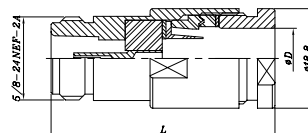
Bulkhead (Clamp)



Product Number

N-BJ-58/U
 N-BJ-59/U

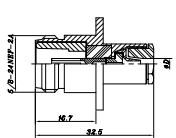
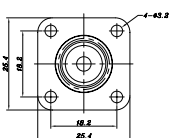
Straight (Clamp)



Product Number

N-J-8/U
 N-J-10
 N-J-17/U
 N-J-58/U
 N-J-59/U

Panel (Clamp)

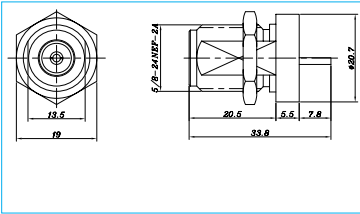


Product Number

N-PJ-8/U
 N-PJ-10
 N-PJ-58/U
 N-PJ-59/U

N Receptacles

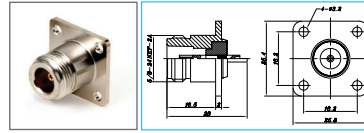
Bulkhead



Product Number

N-BR

Panel

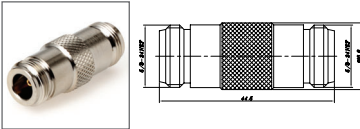


Product Number

N-R

N Adapter & Others

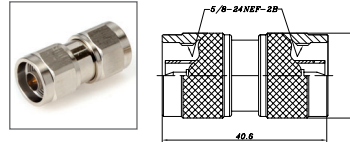
Jack - Jack Adapter



Product Number

N-A-JJ

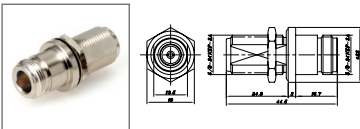
Plug - Plug Adapter



Product Number

N-A-PP

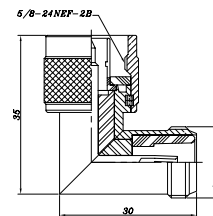
Jack - Jack Bulkhead Adapter



Product Number

N-BA-JJ

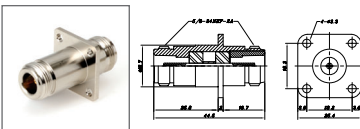
Plug - Jack Right-angle Adapter



Product Number

N-LA-PJ

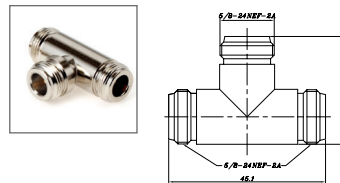
Jack - Jack Panel Adapter



Product Number

N-PA-JJ

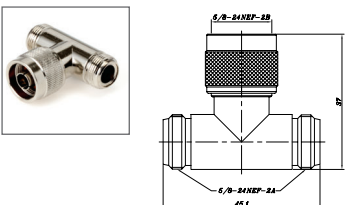
Jack - Jack - Jack Adapter



Product Number

N-TA-JJJ

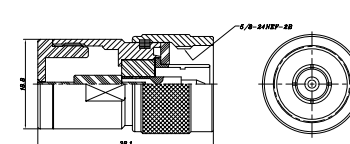
Jack - Plug - Jack Adapter



Product Number

N-TA-JPJ

Plug Terminator

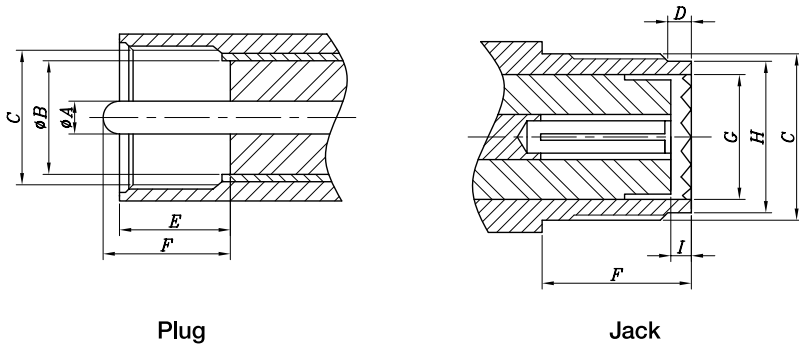


Product Number

N-DUMMY

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

M Interface Dimensions

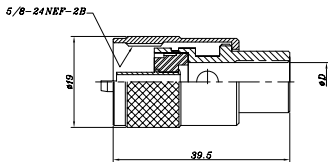


Interface Dimension

| SMA | Plug | | Jack | |
|----------|----------------|------|----------------|------|
| | min. | max. | min. | max. |
| ϕA | 3,91 | | | |
| ϕB | 11,56 | | | |
| C | 5/8-24 UNEF-2B | | 5/8-24 UNEF-2A | |
| D | | | 1,19 | |
| E | 9,91 | | | |
| F | 11,1 | | | |
| G | | | 12,22 | |
| H | | | 13,92 | |
| I | | | 6,76 | |

M Plugs

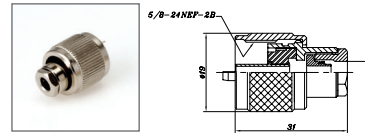
Straight



Product Number

M-P-5
M-P-7
M-P-10

Straight (Clamp)

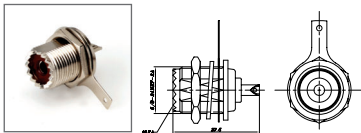


Product Number

M-P-58/U
M-P-59/U

M Receptacles

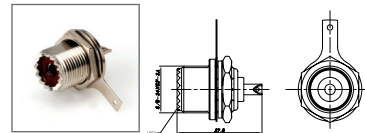
Bulkhead Front Nut



Product Number

CH-239(A)

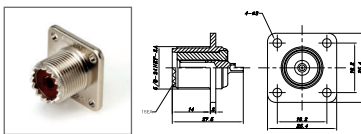
Bulkhead Back Nut



Product Number

CH-239(B)

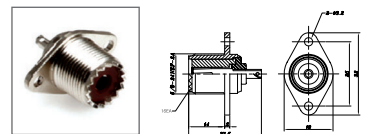
Panel



Product Number

SO-239

Panel (Narrow Flange)

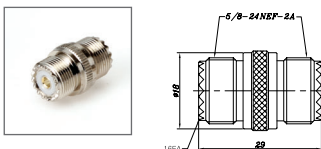


Product Number

SO-239(D)

M Adapter & Others

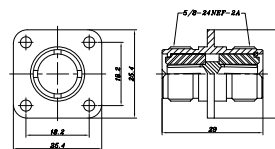
Jack-Jack Adapter



Product Number

M-A-JJ

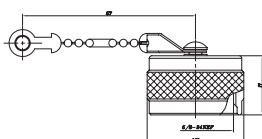
Jack-Jack Panel Adapter



Product Number

M-PA-JJ

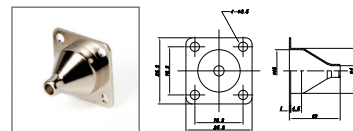
Jack Cap



Product Number

M-JC

Hood

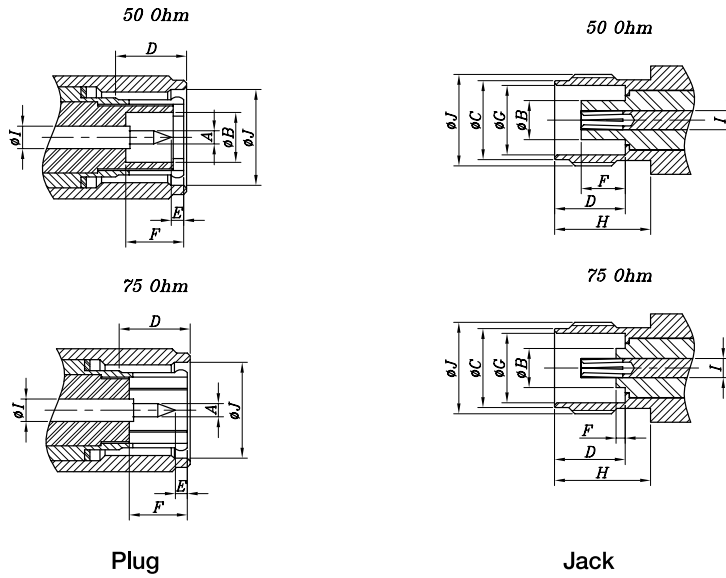


Product Number

M-H

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

TNC Interface Dimensions

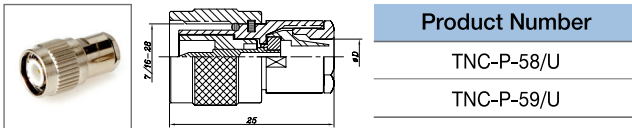


Interface Dimension

| TNC | Plug mm | | Jack mm | |
|-----|-----------------|------|-----------------|------|
| | min. | max. | min. | max. |
| A | 1,32 | 1,37 | | |
| φ B | 4,83 | | | 4,72 |
| φ C | | | 9,6 | 9,7 |
| D | 5,38 | | 8,31 | 8,51 |
| E | 0,35 | | | |
| F | 5,28 | | max,1,5 | 5,28 |
| φ G | | | 8,1 | 8,15 |
| H | | | 10,52 | |
| I | 2,14 | | 2,14 | |
| J | 7/16-28 UNEF-2B | | 7/16-28 UNEF-2A | |

TNC Plugs

Straight (Clamp)

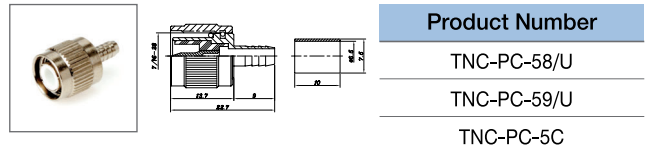


Product Number

TNC-P-58/U

TNC-P-59/U

Straight (Crimp)



Product Number

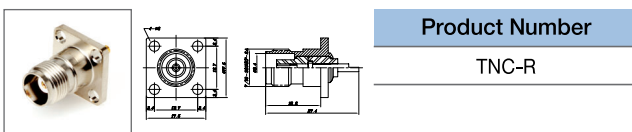
TNC-PC-58/U

TNC-PC-59/U

TNC-PC-5C

TNC Receptacles

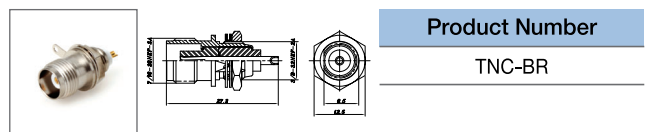
Panel Receptacle



Product Number

TNC-R

Bulkhead Receptacle

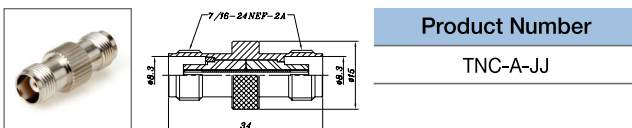


Product Number

TNC-BR

TNC Adapter

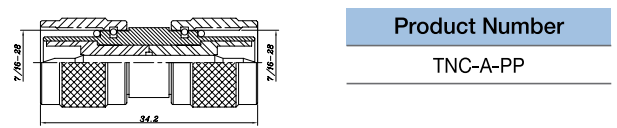
Jack-Jack Adapter



Product Number

TNC-A-JJ

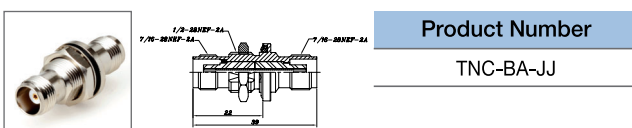
Plug-Plug Adapter



Product Number

TNC-A-PP

Jack-Jack Bulkhead Adapter



Product Number

TNC-BA-JJ

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

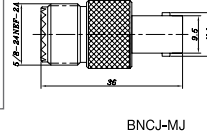


Between Series Part Numbering



Between-Series Adapter

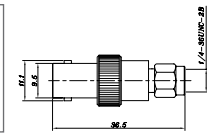
BNC - M Adapter



BNCJ-MJ

| Product Number | BNC | M |
|----------------|------|------|
| BNCP-MP | Plug | Plug |
| BNCP-MJ | Plug | Jack |
| BNCJ-MP | Jack | Plug |
| BNCJ-MJ | Jack | Jack |

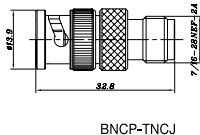
BNC - SMA Adapter



BNCJ-SMAP

| Product Number | BNC | SMA |
|----------------|------|------|
| BNCP-SMAP | Plug | Plug |
| BNCP-SMAJ | Plug | Jack |
| BNCJ-SMAP | Jack | Plug |
| BNCJ-SMAJ | Jack | Jack |

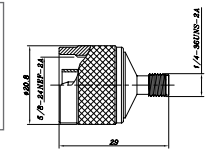
BNC - TNC Adapter



BNCP-TNCJ

| Product Number | BNC | TNC |
|----------------|------|------|
| BNCP-TNCP | Plug | Plug |
| BNCP-TNCJ | Plug | Jack |
| BNCJ-TNCP | Jack | Plug |
| BNCJ-TNCJ | Jack | Jack |

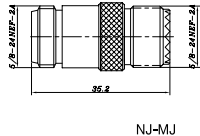
N - SMA Adapter



NJ-BNCJ

| Product Number | BNC | SMA |
|----------------|------|------|
| NP-SMAP | Plug | Plug |
| NP-SMAJ | Plug | Jack |
| NJ-SMAP | Jack | Plug |
| NJ-SMAJ | Jack | Jack |

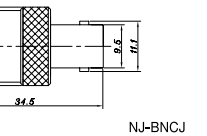
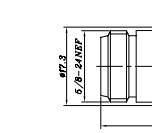
N - M Adapter



NJ-MJ

| Product Number | N | M |
|----------------|------|------|
| NP-MP | Plug | Plug |
| NP-MJ | Plug | Jack |
| NJ-MP | Jack | Plug |
| NJ-MJ | Jack | Jack |

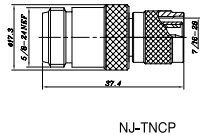
N - BNC Adapter



NJ-BNCJ

| Product Number | BNC | BNC |
|----------------|------|------|
| NP-BNCP | Plug | Plug |
| NP-BNCJ | Plug | Jack |
| NJ-BNCP | Jack | Plug |
| NJ-BNCJ | Jack | Jack |

N - TNC Adapter

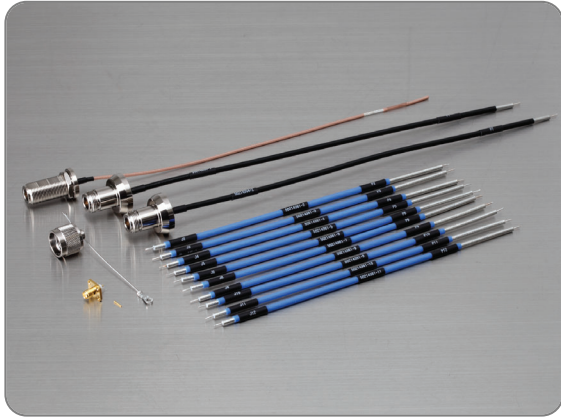


NJ-TNCP

| Product Number | N | TNC |
|----------------|------|------|
| NP-TNCP | Plug | Plug |
| NP-TNCJ | Plug | Jack |
| NJ-TNCP | Jack | Plug |
| NJ-TNCJ | Jack | Jack |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

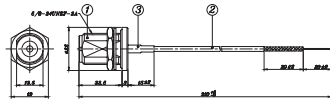




Applications

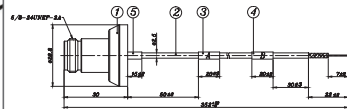
- Military communication

■ **MRF-SW-5708**



| Major Performance | | Material Used / Finish | | |
|---------------------------------|------------|------------------------|----------|---------------|
| Impedance | 50 Ω | General | Material | Finish |
| Frequency range | DC~2,5 GHz | Body | Brass | 무연에Ni Plating |
| V,S,W,R. | ≤ 1,35 | Insulator | PTFE | White |
| Insertion Loss | ≤ 0,5 dB | Contact(Female) | Cu-Be | Gold Plating |
| Dielectric withstanding Voltage | 750 V | RG-316/U Cable | - | Brown |

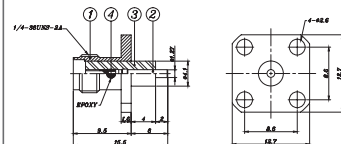
■ **MRF-SW-5759-XX**



| Major Performance | | Material Used / Finish | | |
|---------------------------------|------------|------------------------|----------|---------------|
| Impedance | 50 Ω | General | Material | Finish |
| Frequency range | DC~2,5 GHz | Body | Brass | 무연에Ni Plating |
| V,S,W,R. | ≤ 1,35 | Insulator | PTFE | White |
| Insertion Loss | ≤ 0,5 dB | Contact(Female) | Cu-Be | Gold Plating |
| Dielectric withstanding Voltage | 1,000 V | SF-141J Cable | - | Black |

| P/N | Part | Reference |
|----------------|------|------------|
| MRF-SW-5759-01 | A | 50214352-1 |
| | B | P1 |
| MRF-SW-5759-02 | A | 50214352-2 |
| | B | P7 |

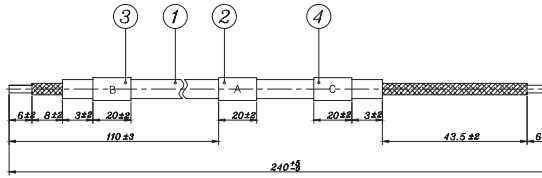
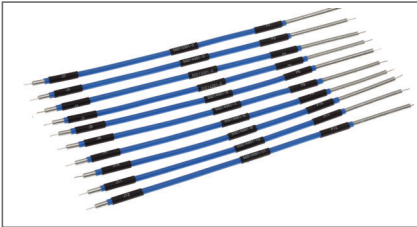
■ **MRF-SMASH-JPR-4H**



| Major Performance | | Material Used / Finish | | |
|---------------------------------|------------|------------------------|-----------------|--------------|
| Impedance | 50 Ω | General | Material | Finish |
| Frequency range | DC~2,5 GHz | Body | Stainless Steel | Gold Plating |
| V,S,W,R. | ≤ 1,35 | Insulator | PTFE | White |
| Dielectric withstanding Voltage | 1,000 V | Contact(Female) | - | Gold Plating |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ MRF-SW-5760-XX



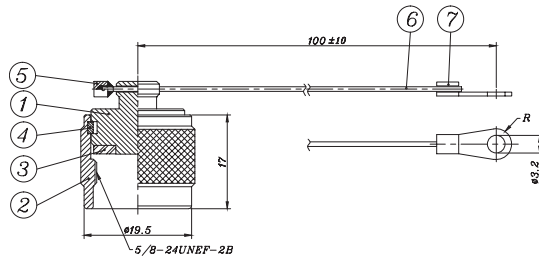
| Material Used / Finish | | |
|------------------------|----------|--------|
| General | Material | Finish |
| SF-141J Cable | - | Blue |

| Product Number | Part | Reference |
|----------------|------|------------|
| MRF-SW-5760-01 | A | 50214361-2 |
| | B | J2 |
| | C | P2 |
| MRF-SW-5760-02 | A | 50214361-3 |
| | B | J3 |
| | C | P3 |
| MRF-SW-5760-03 | A | 50214361-4 |
| | B | J4 |
| | C | P4 |
| MRF-SW-5760-04 | A | 50214361-5 |
| | B | J5 |
| | C | P5 |

| Product Number | Part | Reference |
|----------------|------|------------|
| MRF-SW-5760-05 | A | 50214361-6 |
| | B | J6 |
| | C | P6 |
| MRF-SW-5760-06 | A | 50214361-7 |
| | B | J8 |
| | C | P8 |
| MRF-SW-5760-07 | A | 50214361-8 |
| | B | J9 |
| | C | P9 |
| MRF-SW-5760-08 | A | 50214361-9 |
| | B | J10 |
| | C | P10 |

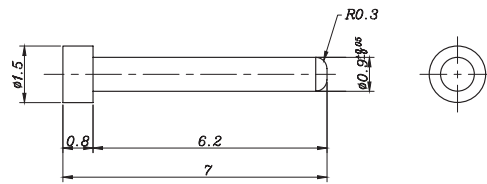
| Product Number | Part | Reference |
|----------------|------|-------------|
| MRF-SW-5760-09 | A | 50214361-10 |
| | B | J11 |
| | C | P11 |
| MRF-SW-5760-10 | A | 50214361-11 |
| | B | J12 |
| | C | P12 |

■ MRF-N-RC



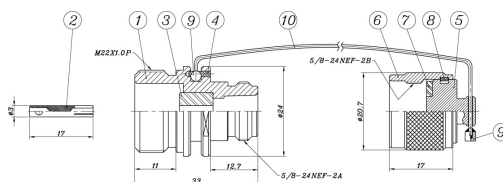
| Material Used / Finish | | |
|------------------------|-----------------|-----------------|
| General | Material | Finish |
| CAP | Brass | 무연해(Ni Plating) |
| Wire | Stainless Steel | - |

■ MRF-PIN



| Material Used / Finish | | |
|------------------------|----------|--------------|
| General | Material | Finish |
| Male | Cu-Be | Gold Plating |

■ MRF-N-J-RB-RC



| Material Used / Finish | | |
|------------------------|-----------------|--------------|
| General | Material | Finish |
| CAP | Brass | Ni Plating |
| Wire | Stainless Steel | - |
| Body | Brass | Ni Plating |
| Insulator | PTFE | White |
| Male | Cu-Bu | Gold Plating |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

D-tap Series D-tap Plug / Jack

■ D-tap



Features

- SW-DTAP-2P
- SW-DTAP-2J
- Standard and Custom Design

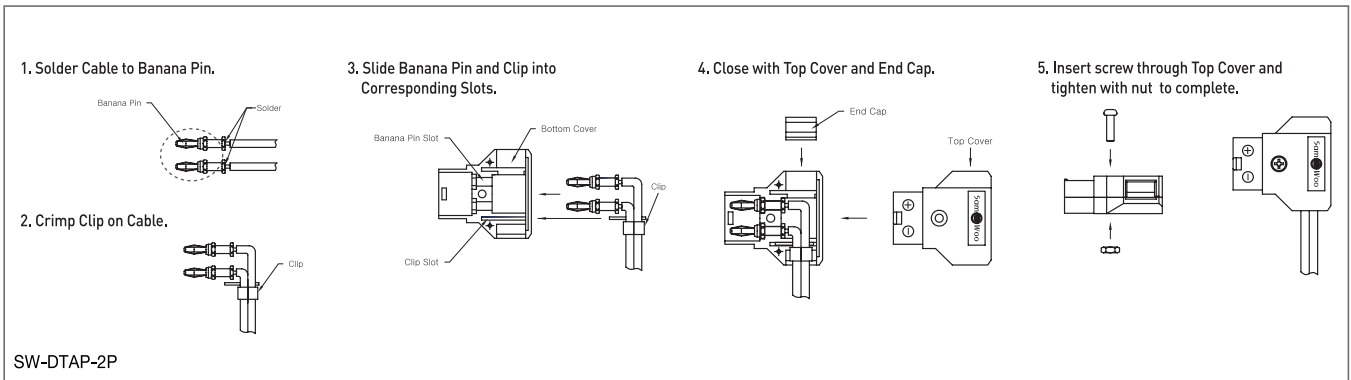
Applications

- Power LED Light
- LCD Monitor
- HDV
- Power Supply
- Battery Power

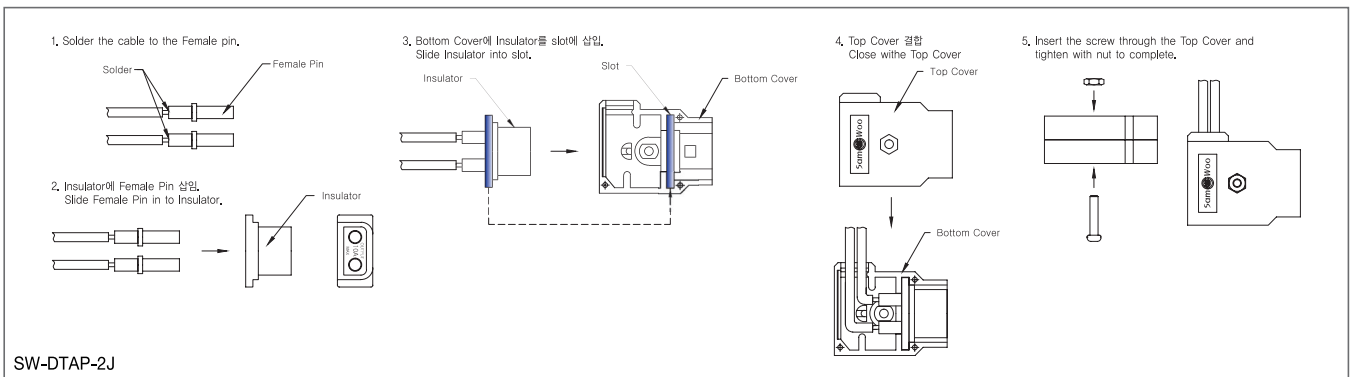
■ Major Performance

| No | Item | Standard Data |
|----|-----------------------|-----------------|
| 1 | Working Temperature | -25℃ ~ + 85℃ |
| 2 | Rated Current | 10A Max(DC) |
| 3 | Test voltage | 300V(DC) |
| 4 | Contact Resistance | 10mΩ (Max) |
| 5 | Insulation Resistance | 10MΩ , 300V min |

■ Cable Assembly Instruction



■ Cable Assembly Instruction



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



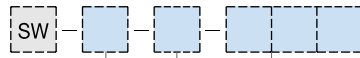
Features

- SW-DTAP-2P
- SW-DTAP-2J
- Standard and Custom Design

Applications

- Power LED Light
- LCD Monitor
- HDV
- Power Supply
- Battery Power

Part Numbering



Drawing Number

Optional Suffix (Omissible)

1,2,3

To indicate modification of original

Cable Length : 3 Digits

Unit Plug : m

Recep : cm

Ex) Using 3m Cable for Plug : 003

Using 30cm Cable for Recep : 030

Cable Assembly



| Type | Construction |
|------|---------------------------------|
| A | D-tap + Cable + Other Connector |

※ Design and Customization Service Available

POWER PIN Series



Features

- POWER PIN(Ni / Au)-2,1
- POWER PIN(Ni / Au)-4,0

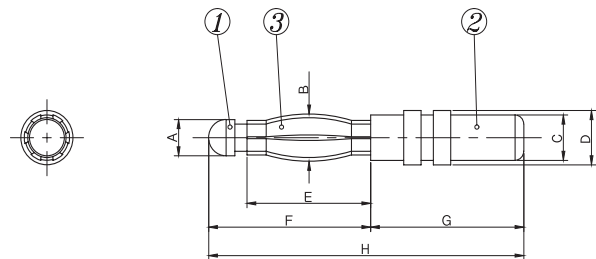
Applications

- Power supply
- Battery power

Material

| No. | Components | Material | Finish |
|-----|---------------|----------|------------------|
| ① | PIN(A) | Brass | Ni or Au Plating |
| ② | PIN(B) | Brass | Ni or Au Plating |
| ③ | Tension Plate | Brass | Ni or Au Plating |

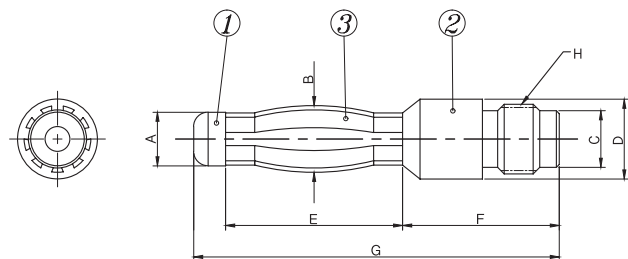
POWER PIN (Ni / Au) - 2,1



Unit : mm

| øA | øB | øC | øD | E | F | G | H |
|----|-----|-----|----|-----|-----|-----|------|
| 2 | 2,6 | 2,5 | 3 | 7,1 | 9,3 | 8,9 | 18,1 |

POWER PIN (Ni / Au) - 4,0



Unit : mm

| øA | øB | øC | øD | E | F | G | H |
|-----|-----|-----|-----|------|------|------|---------|
| 3,7 | 4,6 | 3,9 | 5,5 | 12,2 | 10,8 | 25,2 | M5×0,8P |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

Micro USB IP67 Cable Assembly



Features

- Micro USB 5PIN Male Cable Assembly (IP67)
- Micro USB 5PIN Female Cable Assembly (IP67)

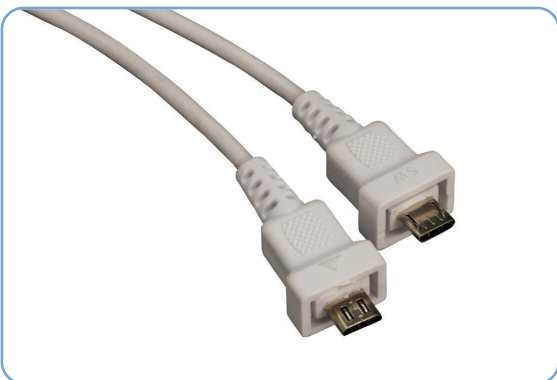
Applications

- Smart Phones and Mobile Devices
- Medical PC Monitors
- Digital Devices (Camera, Media Player, Laptop, etc)
- Telecommunications

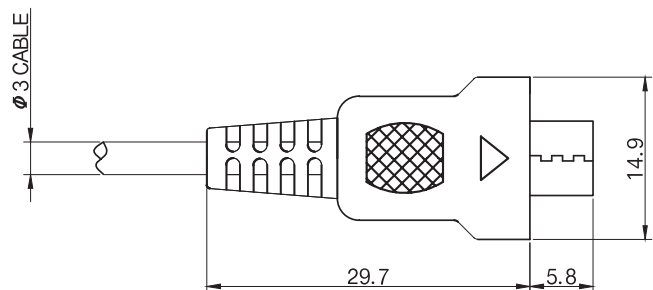
Major Performance

| No. | Item | Standard Data |
|-----|--|-----------------|
| ① | Contact Resistance (Max.) | 30m Ω |
| ② | Insulation Resistance (Min.) | 1,000M Ω |
| ③ | Dielectric Withstanding Voltage (Min.) | 500V AC |

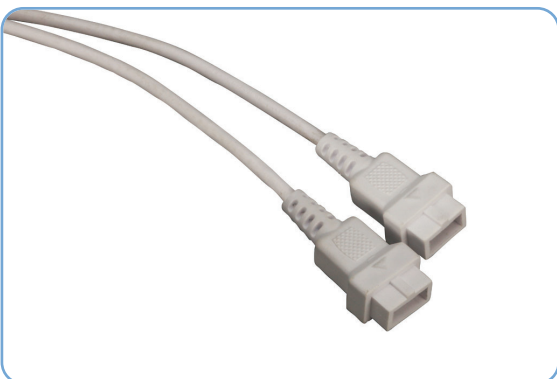
Micro USB 5PIN Male Cable Assembly (IP67)



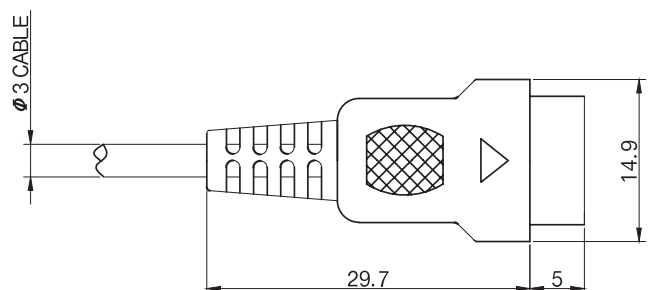
※ Customization Service Available



Micro USB 5PIN Female Cable Assembly (IP67)



※ Customization Service Available



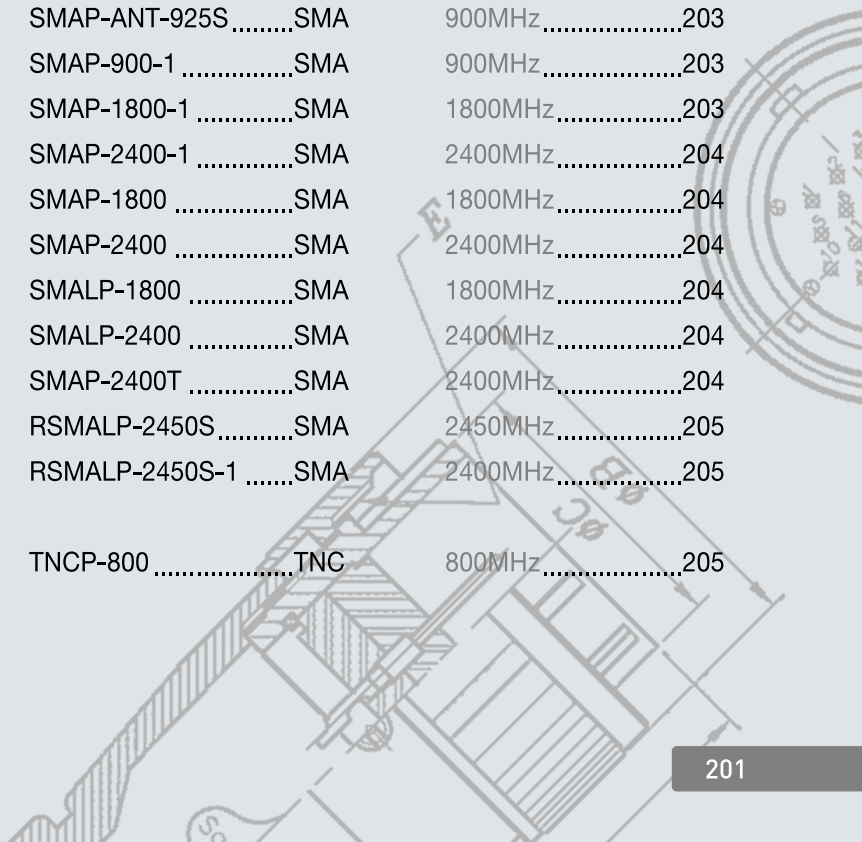
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



Antenna

Antenna

| | | | | |
|-------------|----------------------|----------------|------------------|--------------|
| Custom Band | SPB-450 | SP | 400~900MHz | 202 |
| | SMAP-450 | SMA | 400~900MHz | 202 |
| | SMALP-450 | SMA | 400~900MHz | 202 |
| | SSMAP-450 | SSMA | 400~900MHz | 202 |
| | SPU-450 | SP | 400~900MHz | 202 |
| SMA | SMAP-434 | SMA | 200~900MHz | 203 |
| | SMALP-434 | SMA | 135~900MHz | 203 |
| | SMAP-447 | SMA | 450MHz | 203 |
| | SMAP-ANT-925S | SMA | 900MHz | 203 |
| | SMAP-900-1 | SMA | 900MHz | 203 |
| | SMAP-1800-1 | SMA | 1800MHz | 203 |
| | SMAP-2400-1 | SMA | 2400MHz | 204 |
| | SMAP-1800 | SMA | 1800MHz | 204 |
| | SMAP-2400 | SMA | 2400MHz | 204 |
| | SMALP-1800 | SMA | 1800MHz | 204 |
| | SMALP-2400 | SMA | 2400MHz | 204 |
| | SMAP-2400T | SMA | 2400MHz | 204 |
| | RSMALP-2450S | SMA | 2450MHz | 205 |
| | RSMALP-2450S-1 | SMA | 2400MHz | 205 |
| | TNC Antenna | TNCP-800 | TNC | 800MHz |

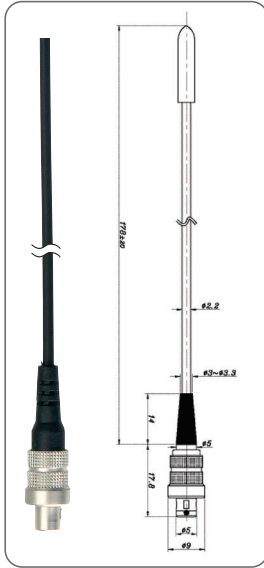


Antenna Customizable Band Antenna

■ SPB-450-Super miniature antenna

The SPB-450 is one of the versatile antenna series customizable from a bandwidth of 400MHz to 900MHz. This new 1/4 wavelength whip antenna brings wireless applications to a new paradigm.

- 1/4 Wavelength Whip antenna
- Customizable band using cutting chart
- 400MHz ~ 900MHz
- Sam Woo' s High-quality SPB connector



| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 400MHz-900MHz |
| Nominal Impedance | 50 Ω |
| Radiation Pattern | Omni directional |
| Polarization | Vertical |
| V.S.W.R | Less than 2.0:1 |
| Gain | 0dB |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SuS |
| Base Material | PVC |
| Sleeve Material | Urethan |
| Cap Material | PVC |
| Antenna Length | ~1780mm |
| Operating Temperature | -30°C ~ + 70°C |



Bare SPB plug and receptacle also available.
For more information on Circular Connectors refer to p. 39.



SPB-00PT1



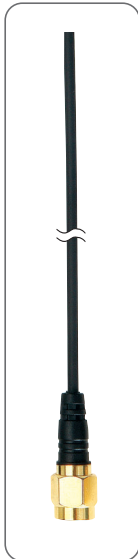
SPB-00RT1

■ SMAP-450

- 1/4 Wavelength Whip Antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- SMA connector
- Cap(s) included

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 400MHz-900MHz |
| Nominal Impedance | 50 Ω |
| Radiation Pattern | Omni directional |
| Polarization | Vertical |
| V.S.W.R | Less than 2.0:1 |
| Gain | 0dB |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SuS |
| Base Material | PVC |
| Sleeve Material | Urethan |
| Cap Material | PVC |
| Antenna Length | ~1780mm |
| Operating Temperature | -30°C ~ + 70°C |

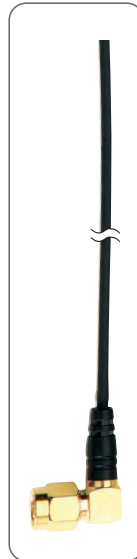


■ SMALP-450

- 1/4 Wavelength Whip Antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- Right-angle SMA connector
- Cap(s) included

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 400MHz-900MHz |
| Nominal Impedance | 50 Ω |
| Radiation Pattern | Omni directional |
| Polarization | Vertical |
| V.S.W.R | Less than 2.0:1 |
| Gain | 0dB |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SuS |
| Base Material | PVC |
| Sleeve Material | Urethan |
| Cap Material | PVC |
| Antenna Length | ~1780mm |
| Operating Temperature | -30°C ~ + 70°C |

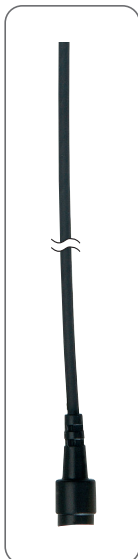


■ SSMAP-450

- 1/4 Wavelength Whip Antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- SSMA connector
- Cap(s) included

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 400MHz-900MHz |
| Nominal Impedance | 50 Ω |
| Radiation Pattern | Omni directional |
| Polarization | Vertical |
| V.S.W.R | Less than 2.0:1 |
| Gain | 0dB |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SuS |
| Base Material | PVC |
| Sleeve Material | Urethan |
| Cap Material | PVC |
| Antenna Length | ~1780mm |
| Operating Temperature | -30°C ~ + 70°C |

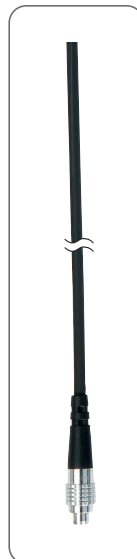


■ SPU-450

- 1/4 Wavelength Whip Antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- SPU connector(also available with SPU receptacle)
- Cap(s) included

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 400MHz-900MHz |
| Nominal Impedance | 50 Ω |
| Radiation Pattern | Omni directional |
| Polarization | Vertical |
| V.S.W.R | Less than 2.0:1 |
| Gain | 0dB |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SuS |
| Base Material | PVC |
| Sleeve Material | Urethan |
| Cap Material | PVC |
| Antenna Length | ~1780mm |
| Operating Temperature | -30°C ~ + 70°C |



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SMAP-434

- 1/4 Wavelength Monopole Antenna
- 180° Tilting Helical or Whip Type
- Available with other connectors

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 420~440MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 0dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Cu |
| Base Material | KEYFLEX |
| Connector | SMA MALE |
| Antenna Length | ~108mm |
| Operating Temperature | -30℃ ~ + 70℃ |

SMALP-434

- 1/4 Wavelength Monopole Antenna
- 90° Fixed Helical or Whip Type
- Available with other connectors

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 420~440MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 0dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Cu |
| Base Material | KEYFLEX |
| Connector | SMA MALE |
| Antenna Length | ~108mm |
| Operating Temperature | -30℃ ~ + 70℃ |

SMAP-447

- 1/2 Wavelength Spike Antenna
- Designed for Outdoor Use

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 400~500MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 1.5:1 |
| Gain(dBi) | 2dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Ni |
| Base Material | BRASS / ACETAL |
| Connector | SMA MALE |
| Antenna Length | ~330mm |
| Operating Temperature | -30℃ ~ + 70℃ |

SMAP-ANT-925S

- 1/2 Wavelength Helical Antenna
- High Gain
- 900Mhz Band

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 900MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 2dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Cu |
| Base Material | KEYFLEX |
| Connector | SMA MALE |
| Antenna Length | ~86mm |
| Operating Temperature | -30℃ ~ + 70℃ |

SMAP-900-1

- 1/4 Wavelength Helical Antenna
- 900Mhz Band

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 824~960MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 0dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Ni |
| Base Material | KEYFLEX |
| Connector | SMA MALE |
| Antenna Length | ~34.5mm |
| Operating Temperature | -30℃ ~ + 70℃ |

SMAP-1800-1

- 1/4 Wavelength Helical Antenna
- 1800MHz Band

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 1710~1990MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 0dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Ni |
| Base Material | KEYFLEX |
| Connector | SMA MALE |
| Antenna Length | ~134.5mm |
| Operating Temperature | -30℃ ~ + 70℃ |

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

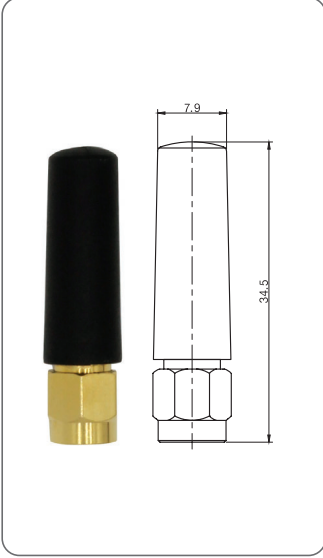
Antenna

■ SMAP-2400-1

- 1/4 Wavelength Helical Antenna
- 2400MHz Band

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 2400~2500MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 0dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Ni |
| Base Material | KEYFLEX |
| Connector | SMA MALE |
| Antenna Length | ~34.5mm |
| Operating Temperature | -30°C ~ +70°C |

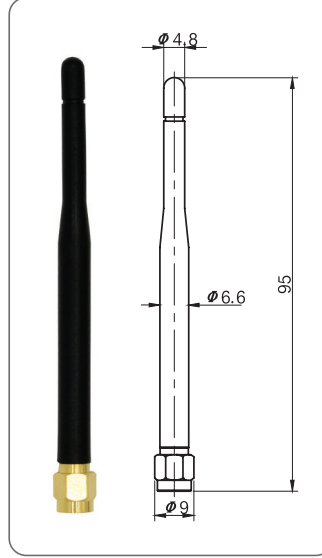


■ SMAP-1800

- 1/2 Wavelength Dipole Antenna
- 1800MHz Band

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 1170~1990MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 2dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Ni |
| Base Material | KEYFLEX |
| Connector | SMA MALE |
| Antenna Length | ~95.0mm |
| Operating Temperature | -30°C ~ +70°C |

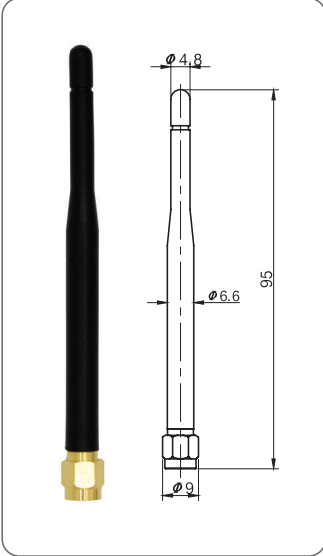


■ SMAP-2400

- 1/2 Wavelength Dipole Antenna
- 2400MHz Band

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 2400~2500MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 2dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Ni |
| Base Material | KEYFLEX |
| Connector | SMA MALE |
| Antenna Length | ~95.0mm |
| Operating Temperature | -30°C ~ +70°C |

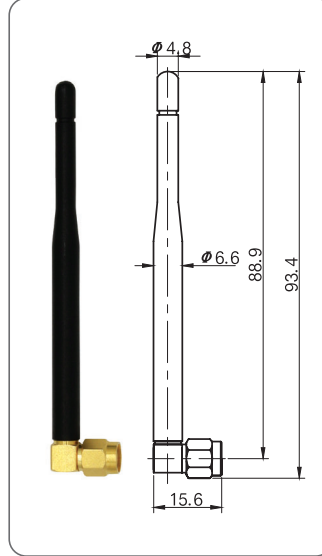


■ SMALP-1800

- 1/2 Wavelength Dipole Antenna
- 90° Fixed 1800MHz Band

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 1170~1990MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 2dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Ni |
| Base Material | KEYFLEX |
| Connector | SMA MALE |
| Antenna Length | ~93.4mm |
| Operating Temperature | -30°C ~ +70°C |

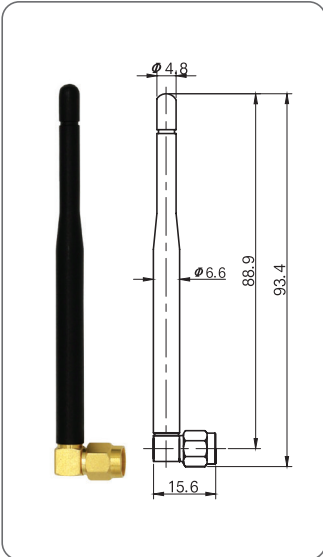


■ SMALP-2400

- 1/2 Wavelength Dipole Antenna
- 90° Fixed 2400MHz Band

| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 2400~2500MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 2dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Ni |
| Base Material | KEYFLEX |
| Connector | SMA MALE |
| Antenna Length | ~93.4mm |
| Operating Temperature | -30°C ~ +70°C |

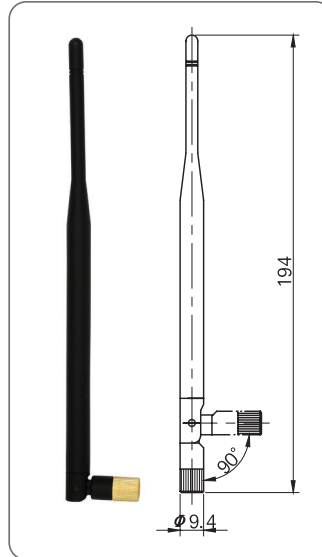


■ SMAP-2400T

- 90° Tilting 2400MHz Bank
- High Gain

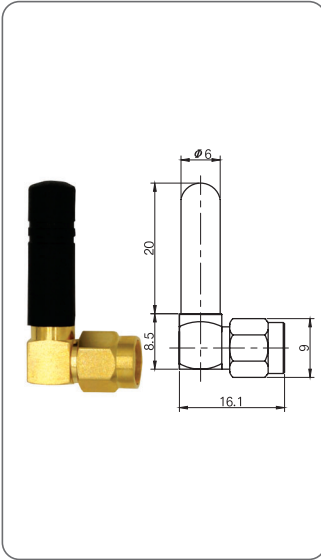
| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 2350~2480MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 4dBi |

| Mechanical Performance | Specifications |
|------------------------|------------------|
| Radiator | Phosphor Bronze |
| Base Material | KEYFLEX / LUMIDE |
| Connector | SMA MALE |
| Antenna Length | ~194mm |
| Operating Temperature | -30°C ~ +70°C |



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

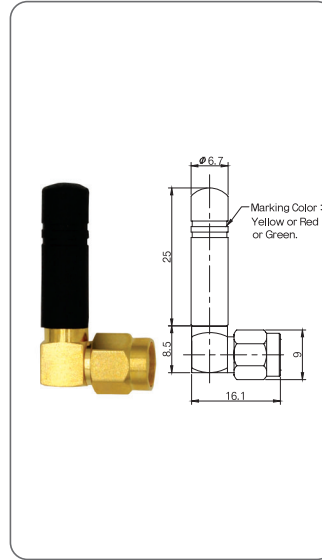
■ RSMALP-2450S



| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 2350~2600MHz |
| Center Frequency | 2.45GHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 1.6dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Ni |
| Base Material | KEYFLEX |
| Connector | RP-SMA |
| Antenna Length | ~93.4mm |
| Operating Temperature | -30℃ ~ + 70℃ |

■ RSMALP-2450S-1

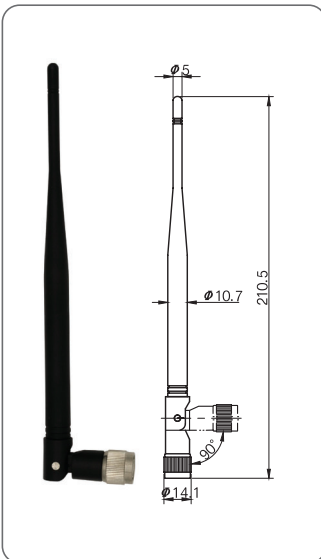


| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 2350~2600MHz |
| Center Frequency | 2.45GHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 1.6dBi |

| Mechanical Performance | Specifications |
|------------------------|----------------|
| Radiator | SWC / Ni |
| Base Material | KEYFLEX |
| Connector | RP-SMA |
| Antenna Length | ~33.5mm |
| Operating Temperature | -30℃ ~ + 70℃ |

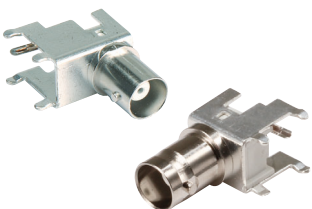
■ TNCP-800

- 1/2 Wavelength Dipole Antenna
- 90° Tilting 800MHz Band



| Electrical Performance | Specifications |
|------------------------|------------------|
| Frequency Range | 824~894MHz |
| Nominal Impedance | 50 Ω Normal ± 10 |
| Radiation Pattern | Omni-directional |
| Polarization | Linear Vertical |
| V.S.W.R | Less Than 2.0:1 |
| Gain(dBi) | 2dBi |

| Mechanical Performance | Specifications |
|------------------------|------------------|
| Radiator | SWC / Ni |
| Base Material | KEYFLEX / LUMIDE |
| Connector | TNC MALE |
| Antenna Length | ~210.5mm |
| Operating Temperature | -30℃ ~ + 70℃ |



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