

Sam Woo Electronics General Catalogue

Edition 10

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 BNC75 Ω BNC50 Ω MRF D-TAP
POWER PIN Micro USB IP67 Cable Assembly

Antenna

SMA TNC BNC



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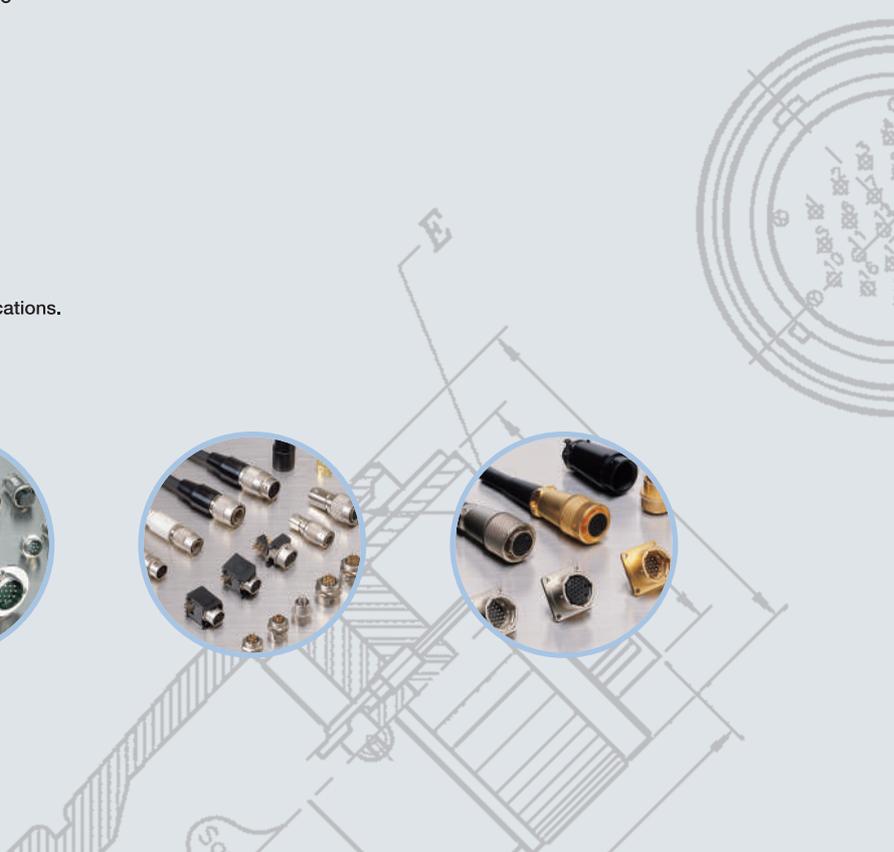
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All dimensions are in millimeters.
Specifications subject to change without notice.
Consult Sam Woo Electronics for the latest specifications.

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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

Others

BNCCHD
BNC75 Ω
BNC50 Ω
N
M
TNC
MRF
D-tap
POWER PIN
MICRO USB IP67 Cable Assembly

Antenna

Between-Series Adapter
Custom Band
SMA
TNC

Circular Connectors

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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.

Circular Overview

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



Push-Pull

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



Push-Pull

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



Push-Pull

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

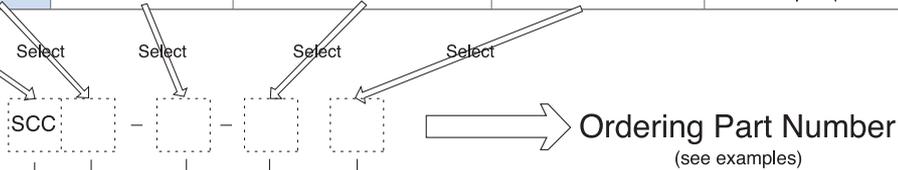
- Rugged
- Light weight
- Low cost
- General purpose

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

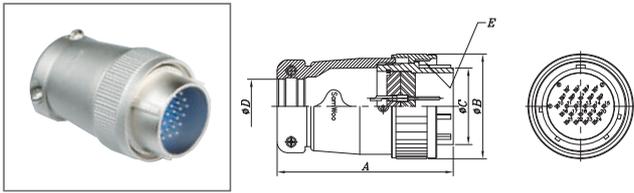
■ SCC Series Mini-map



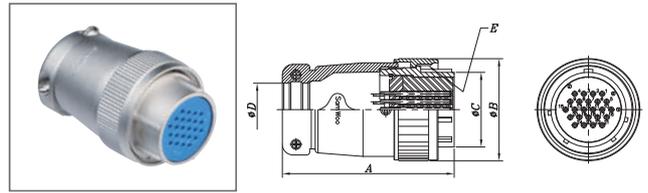
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SCC Series Male / Female Plug, Receptacle, Adapter

■ SCC6A Plug

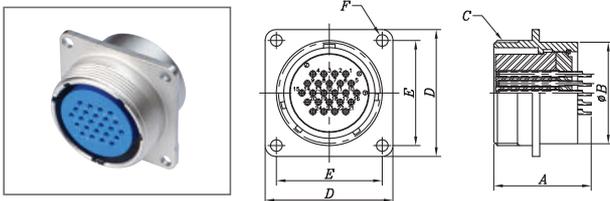


Product Number	A	∅ B	∅ C	∅ D	E
SCC6A-13- 3P	45,7	21,5	12,7	8,0	M18×1,0P
SCC6A-13- 5P					
SCC6A-16- 7P	48,0	25,5	16,3	11,5	M22×1,0P
SCC6A-16- 8P					
SCC6A-16-10P					
SCC6A-21- 3P	53,5	29,7	20,5	14,0	M26×1,0P
SCC6A-21- 4P					
SCC6A-21-10P	53,5	29,7	20,5	14,0	M26×1,0P
SCC6A-21-16P					
SCC6A-25-16P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

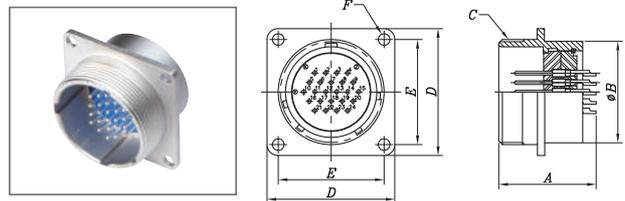


Product Number	A	∅ B	∅ C	∅ D	E
SCC6A-13- 3S	45,7	21,5	12,7	8,0	M18×1,0P
SCC6A-13- 5S					
SCC6A-16- 7S	48,0	25,5	16,3	11,5	M22×1,0P
SCC6A-16- 8S					
SCC6A-16-10S					
SCC6A-21- 3S	53,5	29,7	20,5	14,0	M26×1,0P
SCC6A-21- 4S					
SCC6A-21-10S	53,5	29,7	20,5	14,0	M26×1,0P
SCC6A-21-16S					
SCC6A-25-16S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

■ SCC2A Receptacle

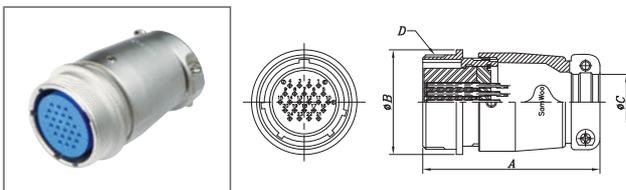


Product Number	A	∅ B	C	D	E	F
SCC2A-13- 3S	27,8	16,0	M18×1,0P	26,0	20,0	4-∅3,2
SCC2A-13- 5S	26,5					
SCC2A-16- 7S	27,6	19,8	M22×1,0P	29,0	23,0	4-∅3,2
SCC2A-16- 8S	27,6					
SCC2A-16-10S	27,0					
SCC2A-21- 3S	31,1	24,0	M26×1,0P	32,0	26,0	4-∅3,3
SCC2A-21- 4S	29,4					
SCC2A-21-10S	27,1	24,0	M26×1,0P	32,0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

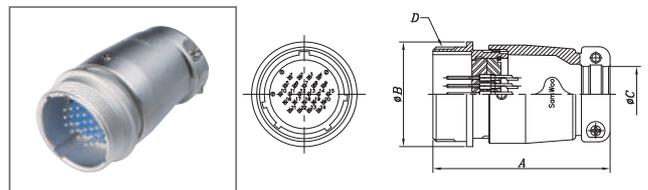


Product Number	A	∅ B	C	D	E	F
SCC2A-13- 3P	26,5	16,0	M18×1,0P	26,0	20,0	4-∅3,2
SCC2A-13- 5P						
SCC2A-16- 7P	26,5	19,8	M22×1,0P	29,0	23,0	4-∅3,2
SCC2A-16- 8P						
SCC2A-16-10P						
SCC2A-21- 3P	30,9	24,0	M26×1,0P	32,0	26,0	4-∅3,3
SCC2A-21- 4P	29,4					
SCC2A-21-10P	25,5	24,0	M26×1,0P	32,0	26,0	4-∅3,3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

■ 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	47,8	25,0	11,5	M22×1,0P
SCC1A-16- 8S				
SCC1A-16-10S				
SCC1A-21- 3S	51,5	29,0	14,0	M26×1,0P
SCC1A-21- 4S				
SCC1A-21-10S	51,5	29,0	14,0	M26×1,0P
SCC1A-21-16S				
SCC1A-25-16S				
SCC1A-25-24S	55,5	33,0	17,5	M30×1,0P



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

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



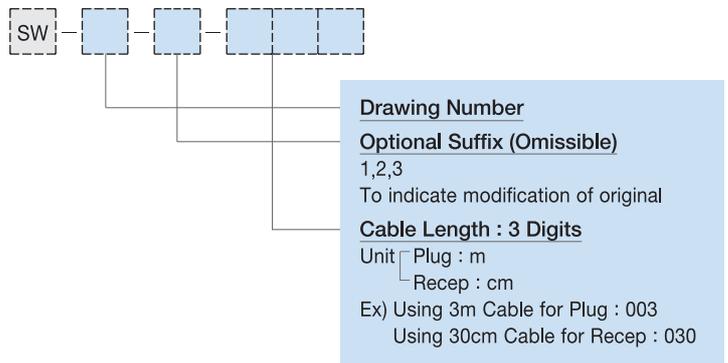
Features

- 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

SCN / SCK Series Part Numbering



Features

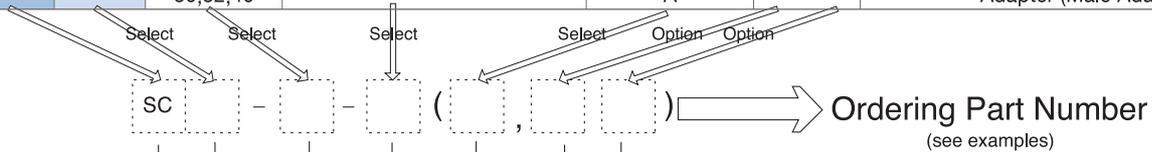
- Rugged
- Simple construction
- Stable mechanical / Electrical performances

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

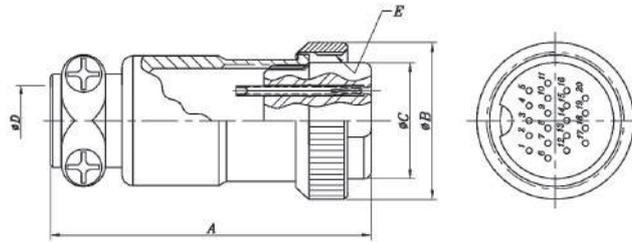
▪ **SCK / SCN Series Mini-map**



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

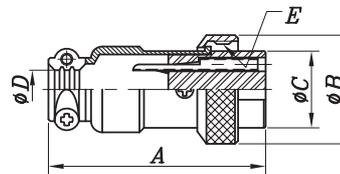


■ SCK Plug



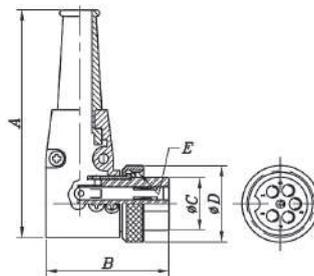
Product Number	A	ø B	ø C	ø D	E				
SCK-12- 2(P)	28,6	14,5	9,2	5,0	M13×0,75P				
SCK-12- 4(P)									
SCK-16- 2(P)	35,7	18,2	12,6	6,4	M16×1,0P				
SCK-16- 3(P)									
SCK-16- 4(P)									
SCK-16- 5(P)									
SCK-20- 2(P)	42,5	21,8	15,5	8,2	M19×1,0P				
SCK-20- 3(P)									
SCK-20- 4(P)									
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- 3(P)									
SCK-32- 4(P)	67,7	45,5	34,8	18,0	M41,5×1,5P				
SCK-40- 2(P)									
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)					

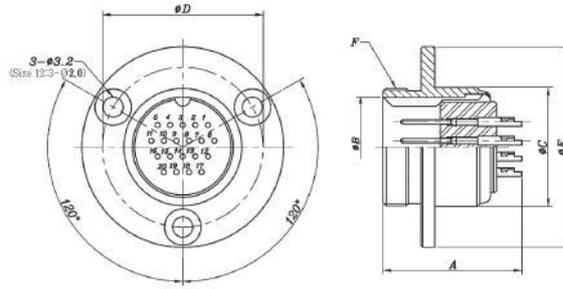
■ SCK Right-Angle Plug



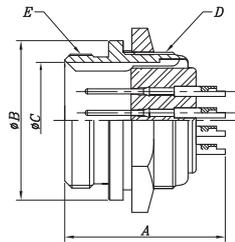
Product Number	A	B	ø C	ø D	E
SCK-16-4(P, L/T)-L	54,0	29	12,6	18,2	M16×1,0P
SCK-16-5(P, L/T)-L					
SCK-16-6(P, L/T)-L					
SCK-16-7(P, L/T)-L					
SCK-16-8(P, L/T)-L					

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

■ SCK Receptacle



■ SCN Receptacle



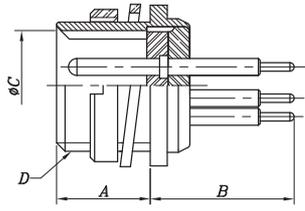
Product Number	A	ϕB	ϕC	D	E					
SCN-12- 2(R)	17,3	15,0	9,6	M12×0,75P	M13×0,75P					
SCN-12- 4(R)										
SCN-16- 2(R)	20,6	18,8	13,0	M16×0,75P	M16×1,0P					
SCN-16- 3(R)										
SCN-16- 4(R)										
SCN-16- 5(R)										
SCN-16- 6(R)										
SCN-16- 7(R)										
SCN-16- 8(R)										
SCN-20- 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

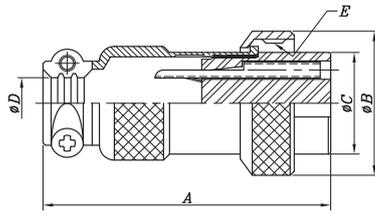
■ SCN PCB Receptacle Solder type also available



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)				

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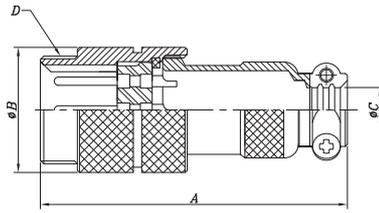
■ SCA Adapter (Female Contact)



SCA-25-8(P)

Product Number	A	φ B	φ C	φ 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	φ B	φ 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)								

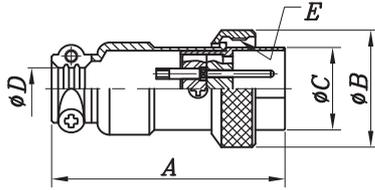
■ SCA Adapter (Set)



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.

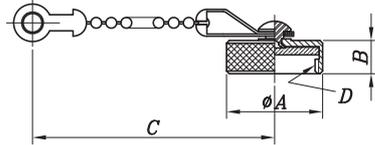
ex) To order SCA-25-10(P) and SCA-25-10(A),
 Select SCA-25-10(P,A)

■ SCKH Plug



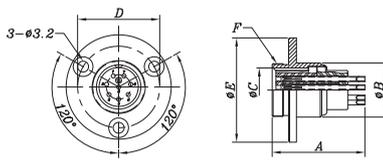
Product Number	A	∅ B	∅ C	∅ D	E
SCKH-16- 4(P)	36,0	18,2	12,7	6,4	M16×1,0P
SCKH-16- 5(P)					
SCKH-16- 8(P)					
SCKH-20-18(P)	42,3	21,8	15,6	8,2	M19×1,0P
SCKH-25- 2(P)	50,0	28,2	21,5	11,0	M25×1,25P
SCKH-25- 4(P)					
SCKH-30- 2(P)	54,0	33,0	25,0	13,0	M29×1,0P

■ SCK Receptacle Cap



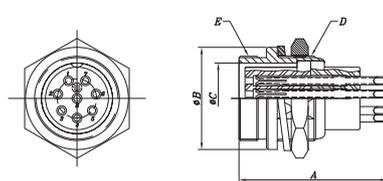
Product Number	∅ A	B	C	D
SCK-12(RC)	14,7	4,7	130	M13×0,75P
SCK-16(RC)	18,0	6,2	130	M16×1,0P
SCK-20(RC)	21,8	7,2	170	M19×1,0P
SCK-25(RC)	28,3	7,0	170	M25×1,25P
SCK-30(RC)	32,8	7,7	170	M29×1,0P
SCK-32(RC)	37,8	8,2	170	M34×1,0P
SCK-40(RC)	45,5	9,2	170	M41,5×1,5P

■ 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

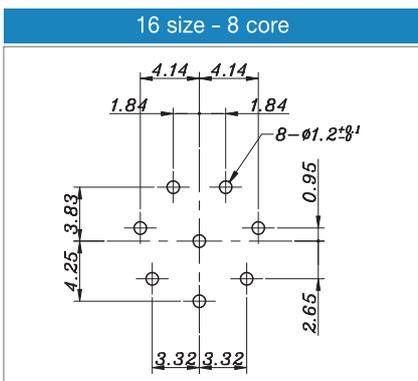
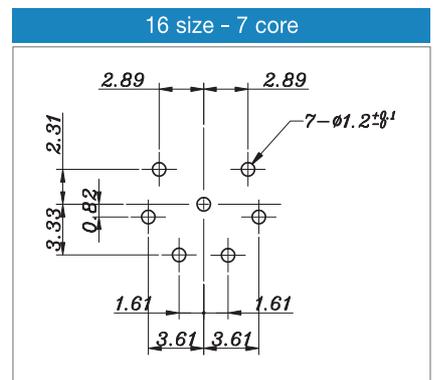
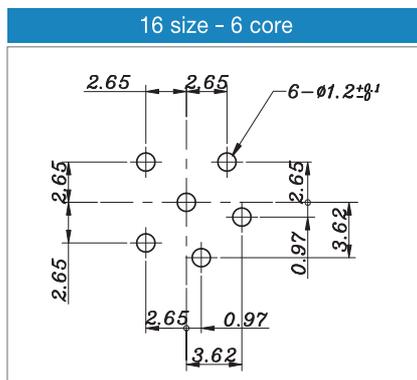
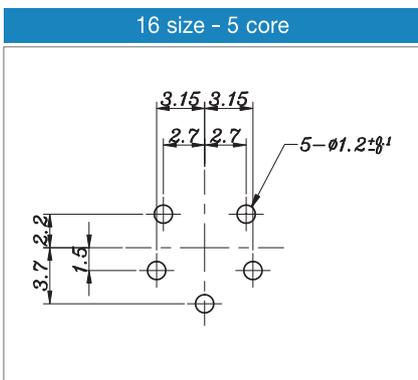
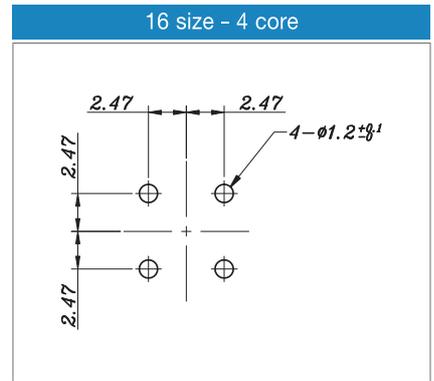
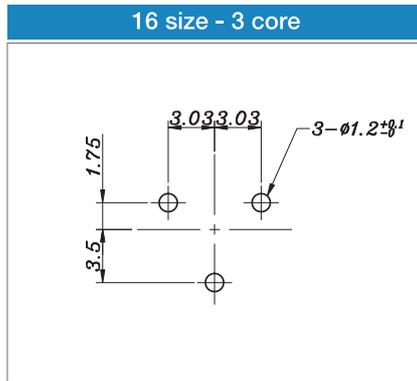
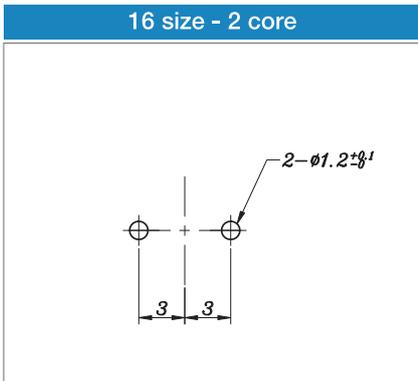
■ SCNH Receptacle



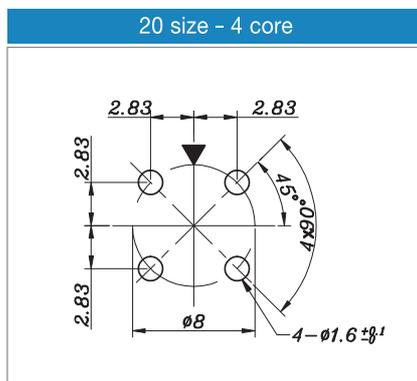
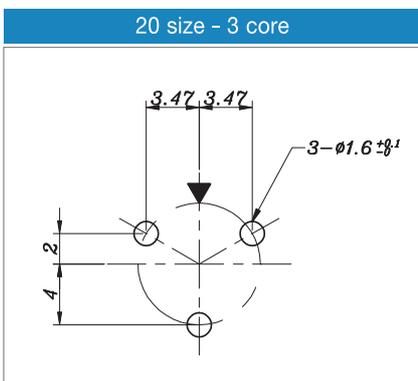
Product Number	A	∅ B	∅ C	D	E
SCNH-16- 4(R)	20,6	18,8	13,0	M16×0,75P	M16×1,0P
SCNH-16- 5(R)					
SCNH-16- 8(R)					
SCNH-20-18(R)	20,5	23,0	15,9	M19×0,75P	M19×1,0P
SCNH-25- 2(R)	22,0	29,0	21,9	M25×1,0P	M25×1,25P
SCNH-25- 4(R)					

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

■ SCN-16 BRPCB Series PCB Hole Layout

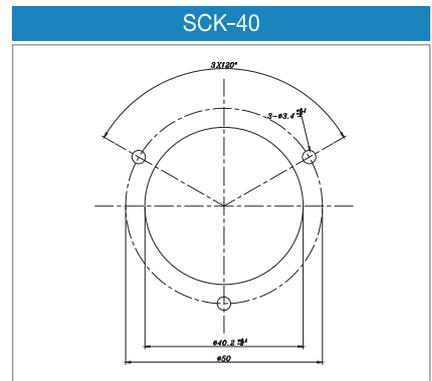
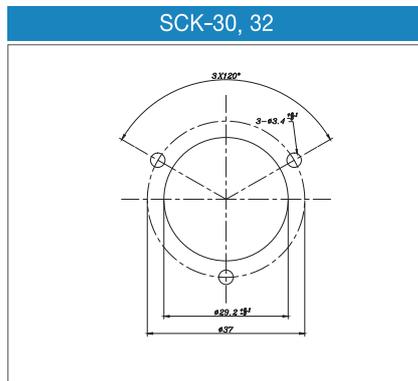
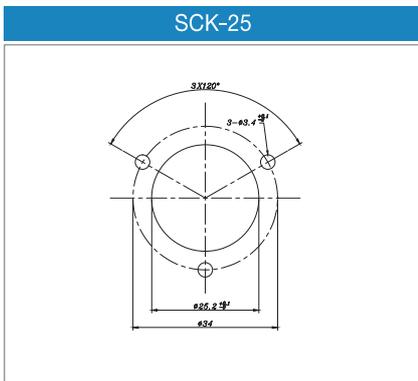
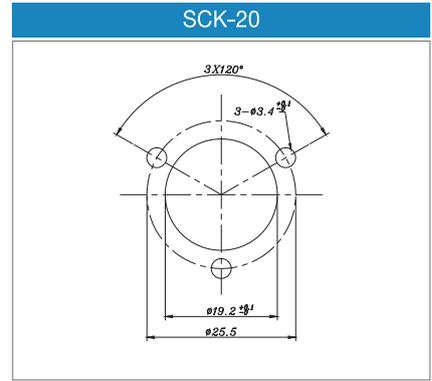
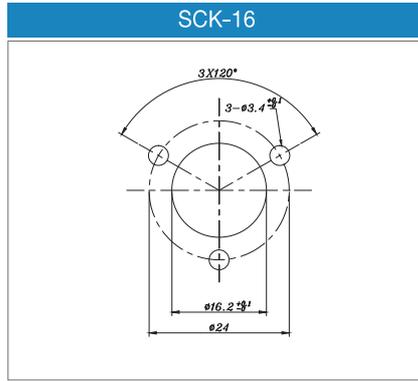
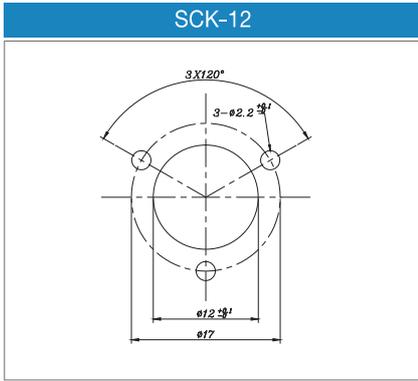


■ SCN-20 BRPCB Series PCB Hole Layout

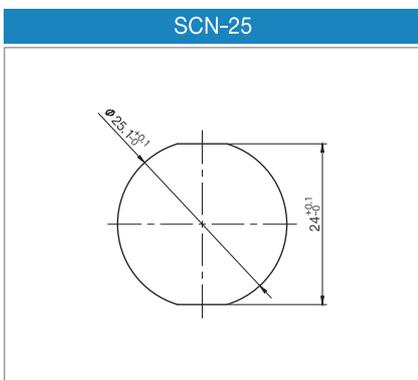
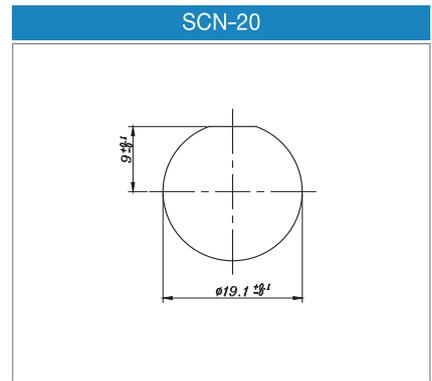
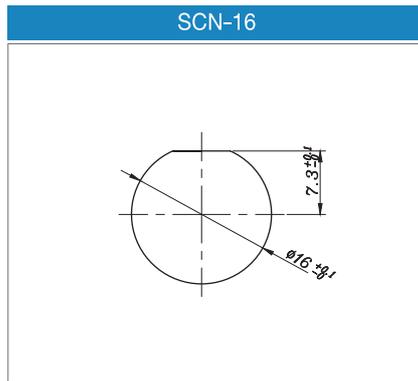
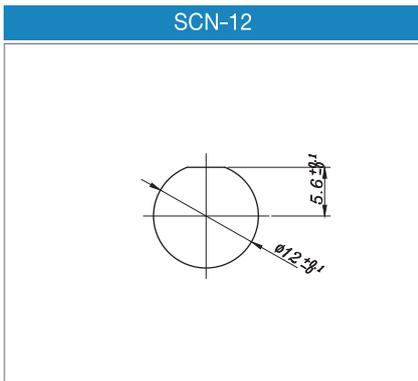


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SCK Series Panel Layout



■ SCN Series Panel Lay Out



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



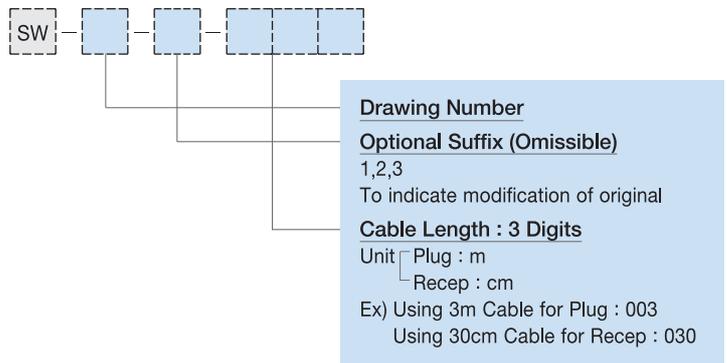
Features

- 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

SH Series Part Numbering / Specifications / Mini map



Features

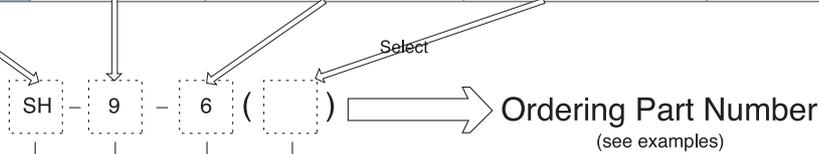
- Compact
- Durable
- Contemporary design

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

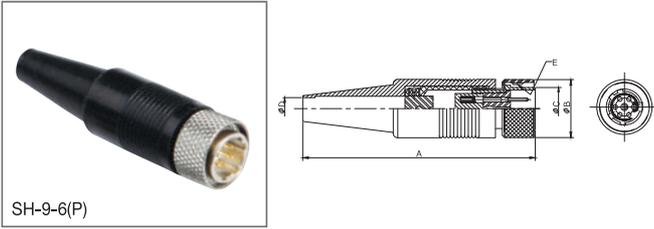
		Material	Finish
Body		Brass	Chromium Plating
Insulator		Glass-filled polyacetal	White
Contacts	Male	Brass	Gold Plating
	Female	Phosphor bronze	Gold Plating

SH-9-6 Mini-map



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

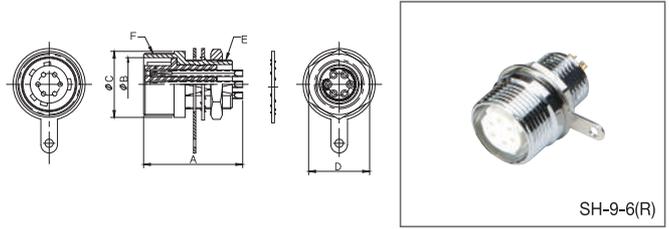
■ SH-9-6(P)



SH-9-6(P)

Product Number	A	∅ B	∅ C	∅ D	E
SH-9-6(P)	51,0	12,9	9,4	4,9	M11,5×0,75P

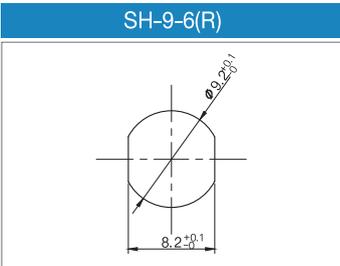
■ SH-9-6(R)



SH-9-6(R)

Product Number	A	∅ B	∅ 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

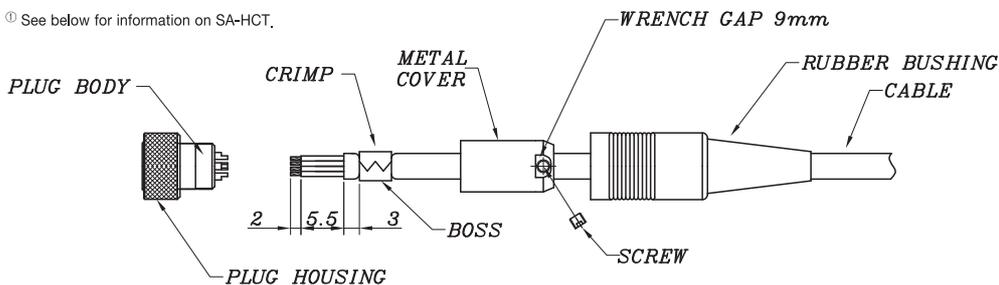
■ General Instruction / Information

- 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.

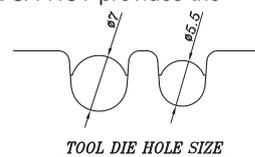
^① See below for information on SA-HCT.



■ 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 ∅ 7.0 for SH series.



TOOL DIE HOLE SIZE



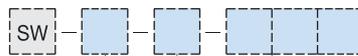
Features

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

Applications

- Microphone circuitry
- Wireless communication

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	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

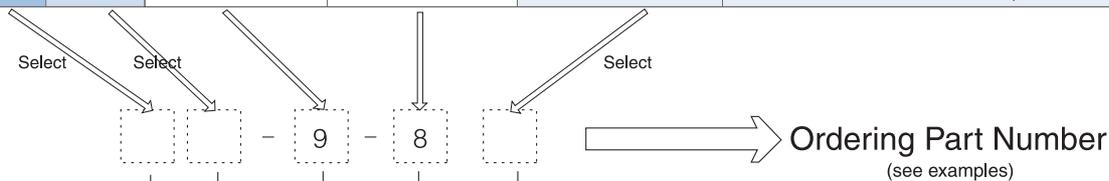
- Miniature circular
- High durability / reliability
- Light weight

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

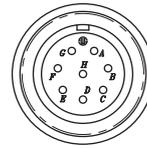
Body Type

P : Plug

R : Receptacle

Major Performances / Contact Arrangements

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



- 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

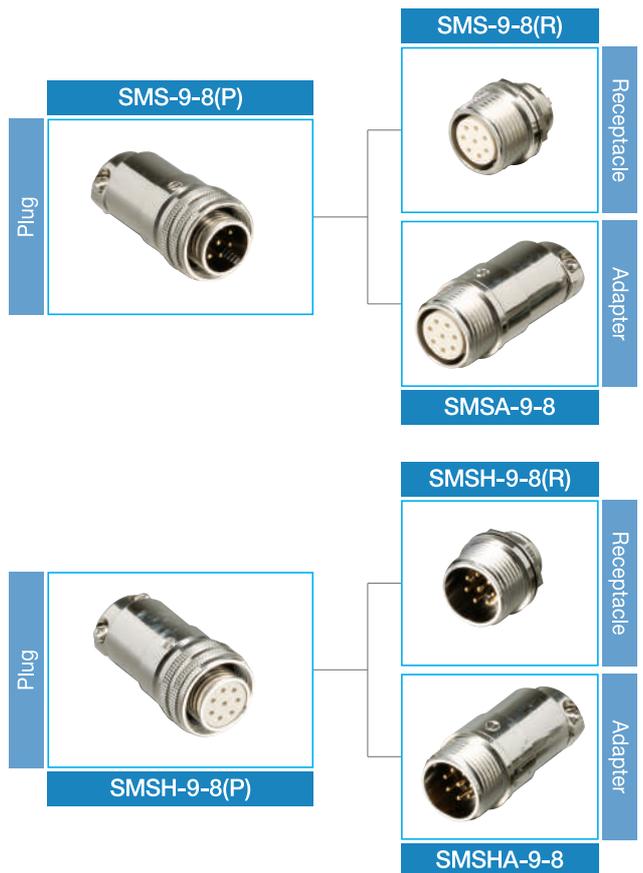
	Material	Finish
Body	Brass	Ni Plating
Insulator	PA	Black, Ivory
Contacts	Male	Brass
	Female	Phosphor bronze
		Gold Plating

SM Series Mini-map

SMP Series Push-Pull Type



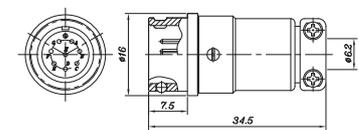
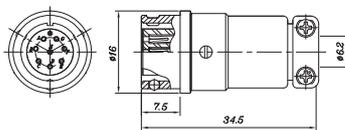
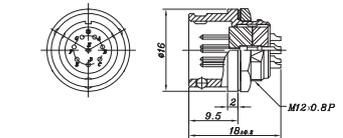
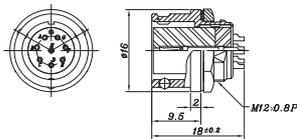
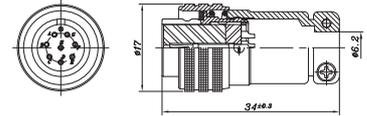
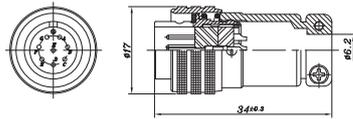
SMS Series Screw-On Type



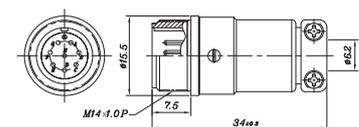
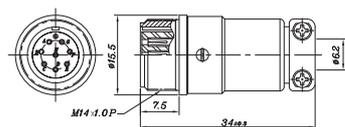
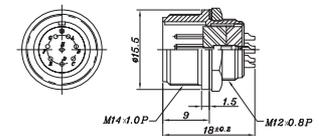
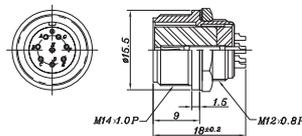
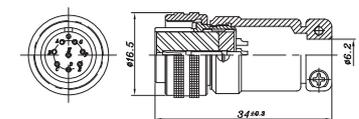
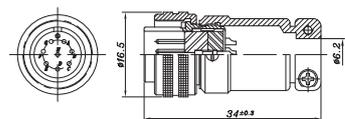
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

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

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

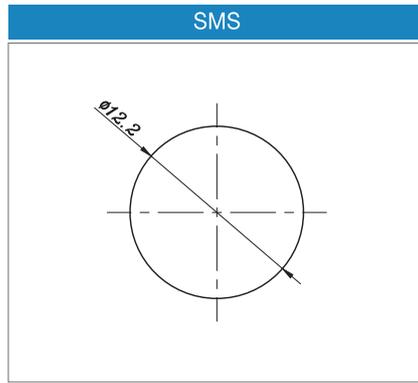
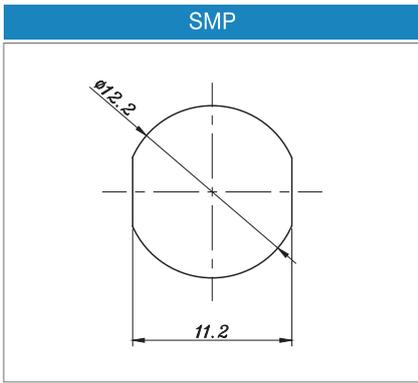


■ Screw-On type Male / Female Plug, Receptacle, Adapter



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

■ SM Series Panel Layout





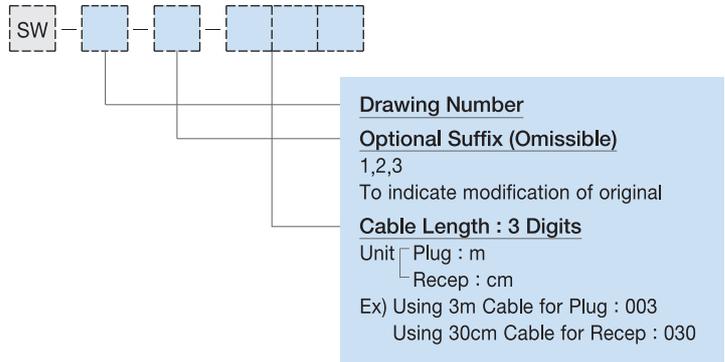
Features

- 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**



■ **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

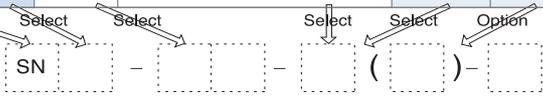
- Push-pull technology
- Miniature circular
- Light weight
- Low cost

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)

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	

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

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					
Contact Resistance (Maximum) ³	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						

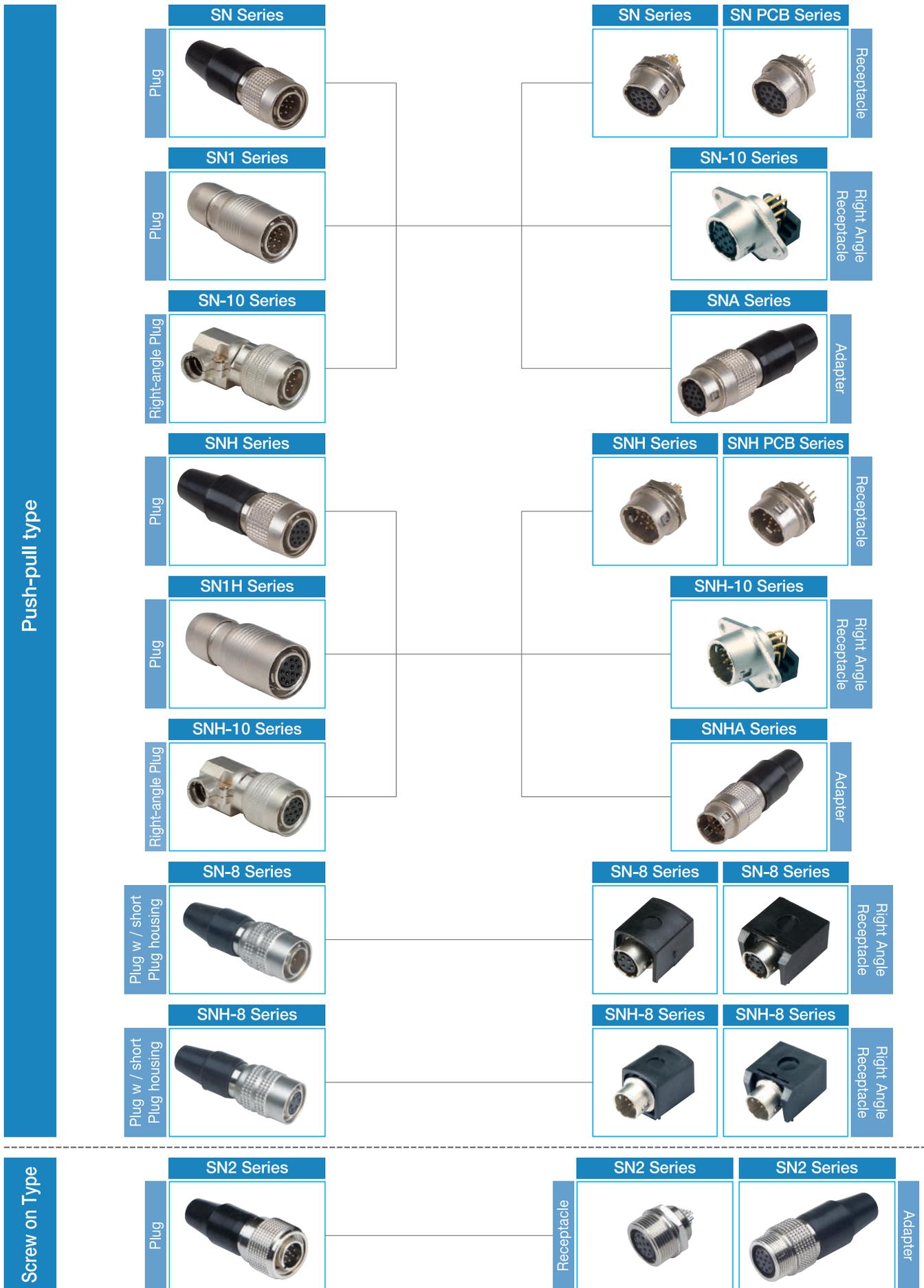
¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
 • Specifications subject to change without notice.
 • Consult Sam Woo Electronics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

Contact Diameter
 ∅ 0,55mm ∅ 1,0mm

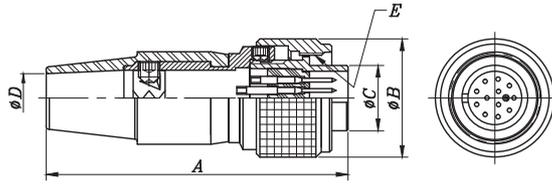
■ Material Used / Finish

	Material	Finish
Body	Zinc alloy and brass	Ni Plating
Insulator	PA	Black
Contacts	Male	Brass Gold or Silver Plating
	Female	Phosphor bronze Gold or Silver Plating

SN Series Mini-map

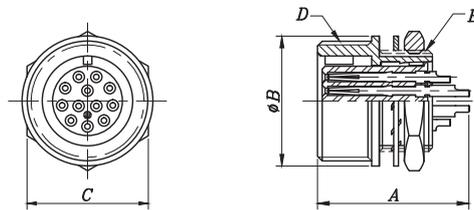


■ SN2 Plug



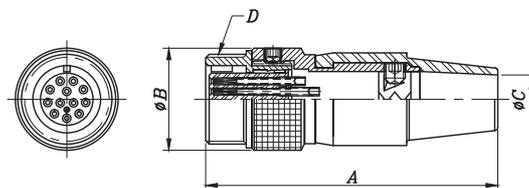
Product Number	A	∅ B	∅ C	∅ D	E	Product Number	A	∅ B	∅ C	∅ D	E
SN2-8-4 (P)	35,1	12	7	5,1	M10×0,75P	SN2-10-2 (P)	43,0	17,0	9,4	7,0	M13×0,75P
SN2-8-5 (P)						SN2-10-3 (P)					
SN2-8-6 (P)						SN2-10-4 (P)					
	SN2-10-9 (P)										
	SN2-10-10 (P)										
	SN2-10-12 (P)										

■ SN2 Receptacle



Product Number	A	∅ B	C	D	E	Product Number	A	∅ 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

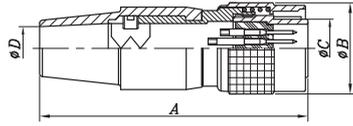


Product Number	A	∅ B	∅ C	D	Product Number	A	∅ B	∅ C	D
SN2A-8-4	41,7	14,7	7,0	M13×0,75P	SN2A-10-2	41,7	14,7	7,0	M13×0,75P
SN2A-8-5					SN2A-10-3				
SN2A-8-6					SN2A-10-4				
	SN2A-10-9								
	SN2A-10-10								
	SN2A-10-12								

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

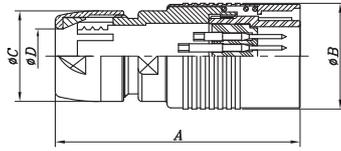
SN Series Push-pull type SN Male Plug

■ SN Plug



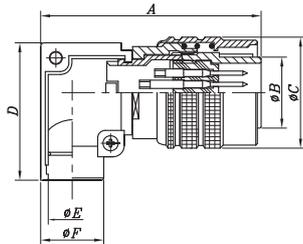
Product Number	A	ø B	ø C	ø D
SN-8-4(P)	35	11,5	7	5
SN-8-5(P)				
SN-8-6(P)				
SN-10-2(P)	43	14,9	9,4	7
SN-10-3(P)				
SN-10-4(P)				
SN-10-9(P)				
SN-10-10(P)				
SN-10-12(P)				

■ SN1 Plug



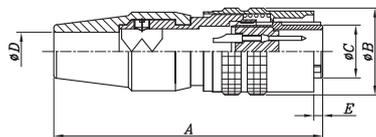
Product Number	A	ø B	ø C	ø D
SN1-8-4(P)	28	11,0	9,0	5,2
SN1-8-5(P)				
SN1-8-6(P)				
SN1-10-2(P)	32	14,0	12,0	7,2
SN1-10-3(P)				
SN1-10-4(P)				
SN1-10-9(P)				
SN1-10-10(P)				
SN1-10-12(P)				

■ 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	15	5,0	6,6
SN-8-5(PL)						
SN-8-6(PL)						
SN-10-9(PL)	29,0	9,4	14,7	18,2	6,3	8,3
SN-10-10(PL)						
SN-10-12(PL)						

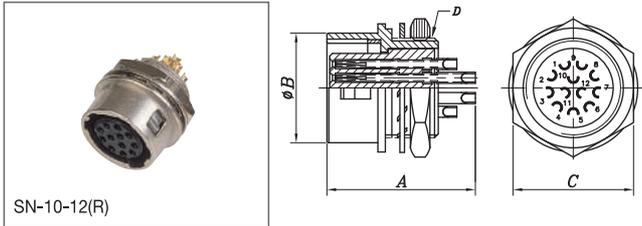
■ SN Plug (Short plug housing)



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.

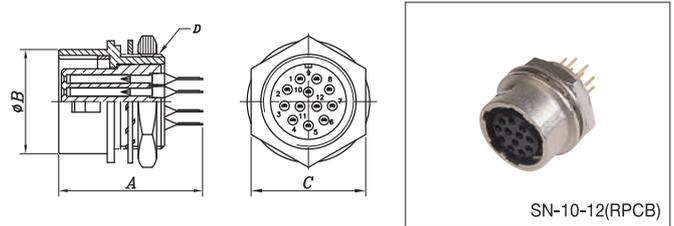
■ SN Receptacle



SN-10-12(R)

Product Number	A	φ B	C	D	Product Number	A	φ 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)									

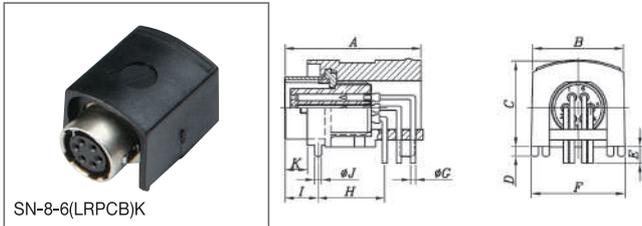
■ SN PCB Receptacle



SN-10-12(RPCB)

Product Number	A	φ B	C	D	Product Number	A	φ 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)

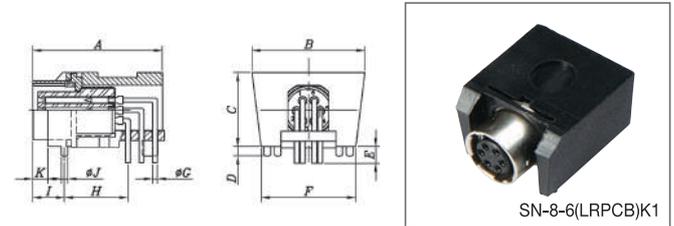


SN-8-6(LRPCB)K

Product Number	A	B	C	D	E	F	φ G	H	I	φ 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)

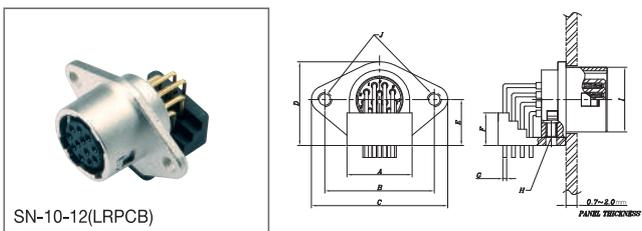


SN-8-6(LRPCB)K1

Product Number	A	B	C	D	E	F	φ G	H	I	φ 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.

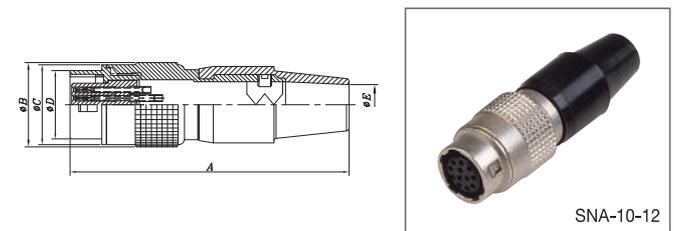
■ SN Right Angle PCB Receptacle



SN-10-12(LRPCB)

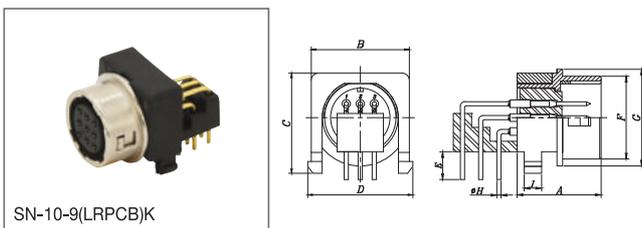
Product Number	A	B	C	D	E	F	φ G	H	φ I	J
SN-10-12(LRPCB)	11,9	20	24,9	15,4	8,5	6	0,7	M2,0 ×0,4P	11,9	M2,6 ×0,45P

■ SNA Adapter



SNA-10-12

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



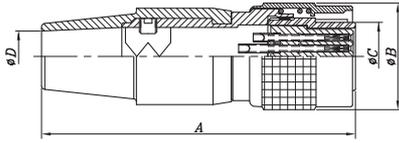
SN-10-9(LRPCB)K

Product Number	A	B	C	D	E	F	G	φ 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.

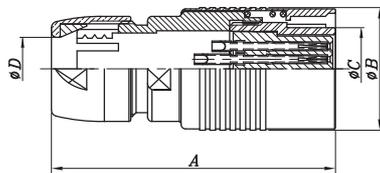
SN Series Push-pull type SNH Female Plug

■ SNH Plug



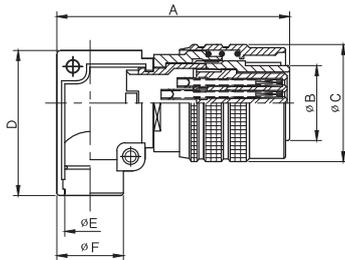
Product Number	A	φ B	φ C	φ D
SNH-8-4(P)	35	11,5	7	5
SNH-8-5(P)				
SNH-8-6(P)				
SNH-10-2(P)	43	14,9	9,4	7
SNH-10-3(P)				
SNH-10-4(P)				
SNH-10-9(P)				
SNH-10-10(P)				
SNH-10-12(P)				

■ SN1H Plug



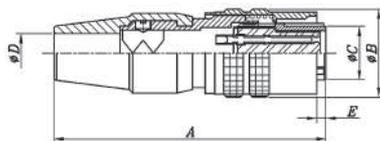
Product Number	A	φ B	φ C	φ D
SN1H-8-4(P)	28	11,0	9,0	5,2
SN1H-8-5(P)				
SN1H-8-6(P)				
SN1H-10-2(P)	32	14,0	12,0	7,2
SN1H-10-3(P)				
SN1H-10-4(P)				
SN1H-10-9(P)				
SN1H-10-10(P)				
SN1H-10-12(P)				

■ SNH Right Angle Plug



Product Number	A	φ B	φ C	D	φ E	φ F
SNH-8-4(PL)	25,9	7,0	11,5	15	5,0	6,6
SNH-8-5(PL)						
SNH-8-6(PL)						
SNH-10-9(PL)	29,0	9,4	14,7	18,2	6,3	8,3
SNH-10-10(PL)						
SNH-10-12(PL)						

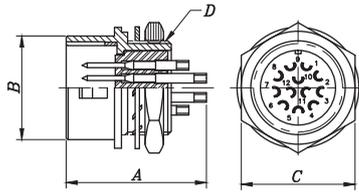
■ SNH Plug (Short plug housing)



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

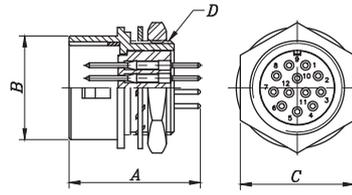
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SNH Receptacle



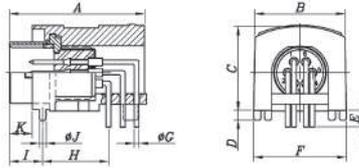
Product Number	A	φ B	C	D	
SNH-8-4 (R)	14,2	8,8	10,0	M8×0,5P	
SNH-8-5 (R)					
SNH-8-6 (R)					
SNH-10-2(R)	16,2	11,9	13,0		M11×0,75P
SNH-10-3(R)					
SNH-10-4(R)					
SNH-10-9(R)					
SNH-10-10(R)					
SNH-10-12(R)					

■ SNH PCB Receptacle



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

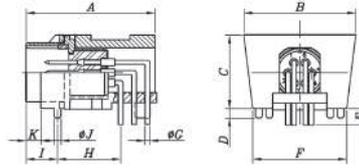
■ SNH Right Angle PCB Receptacle (Any Type)



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.

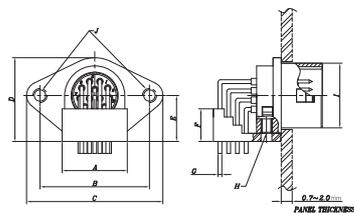
■ SNH Right Angle PCB Receptacle (Magic Type)



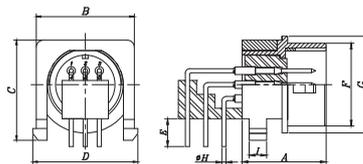
Product Number	A	B	C	D	E	F	φ G	H	I	φ J	K
SNH-8-4(LRPCB)K1	19,2	16,7	11,0	1,3	2,4	14,0	0,7	9,4	4,7	1,0	2,2
SNH-8-6(LRPCB)K1											

! 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

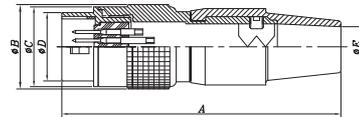


Product Number	A	B	C	D	E	F	φ G	H	φ I	J
SNH-10-12(LRPCB)	11,9	20	24,9	15,4	8,5	6	0,7	M2,0 ×0,4P	11,9	M2,6 ×0,45P



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
SNHA-8-4	40,2	11,5	10,9	8,8	5,1
SNHA-8-5					
SNHA-8-6					
SNHA-10-2	48,0	14,9	13,9	11,9	7,0
SNHA-10-3					
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

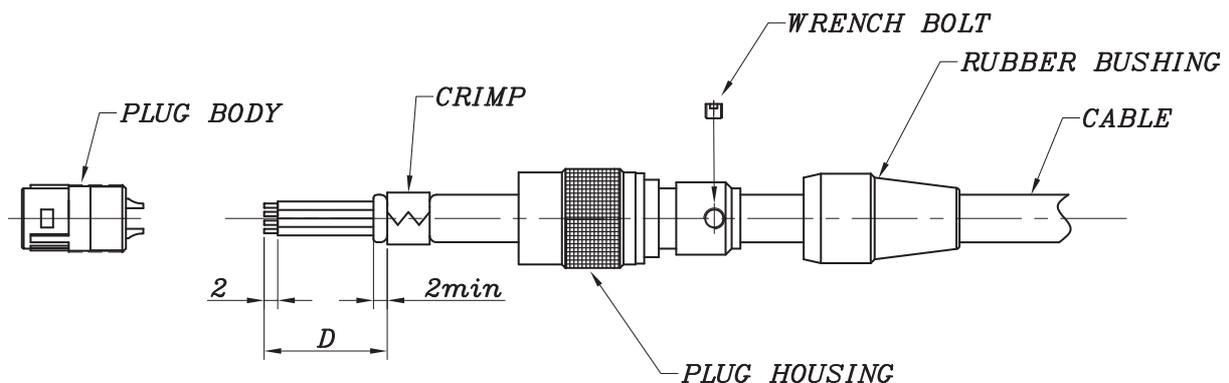


Table 1

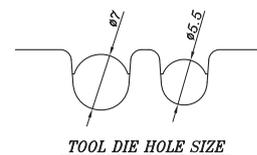
unit : mm

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

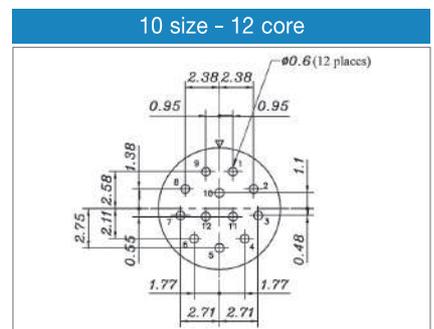
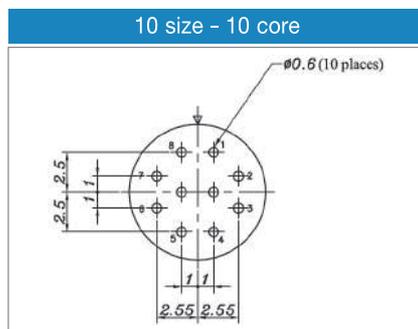
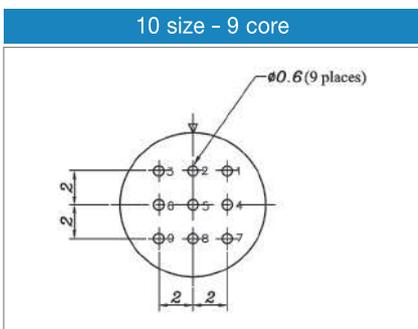
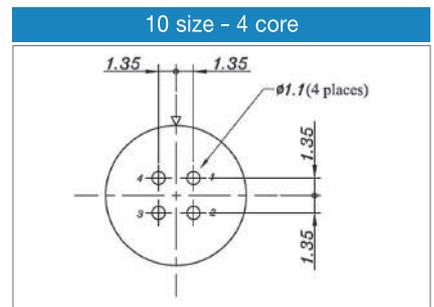
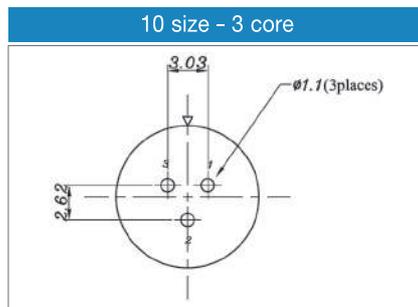
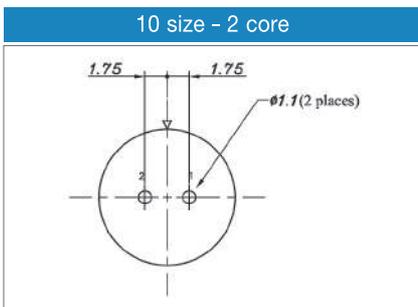
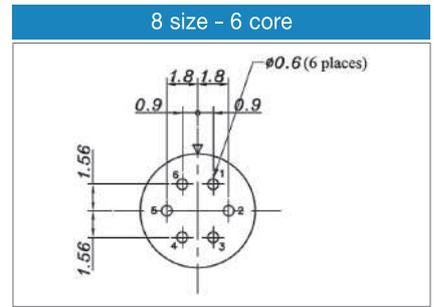
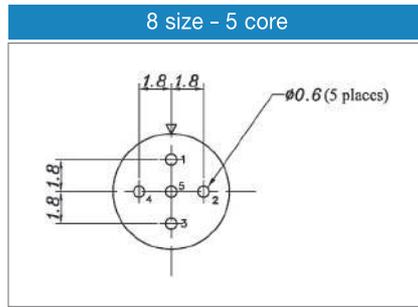
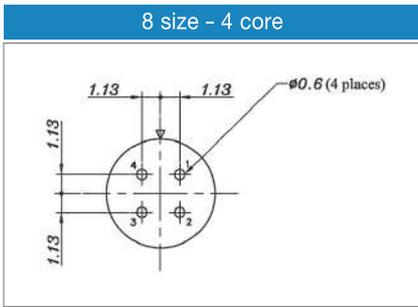
SA-HCT (Hand Crimp Tool)



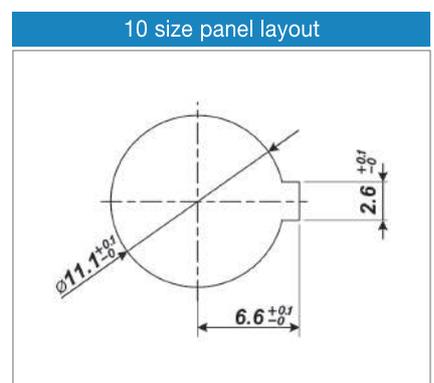
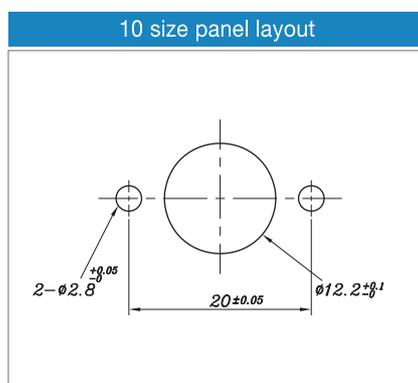
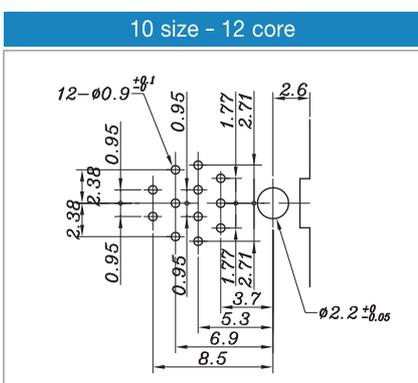
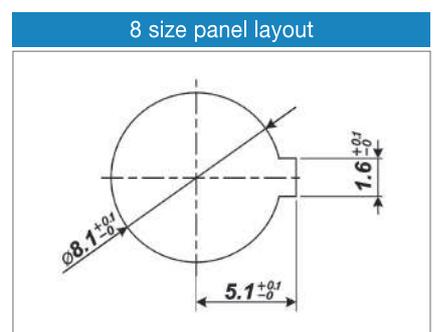
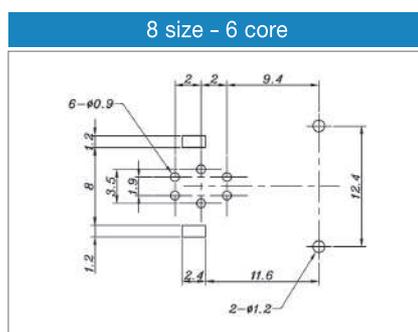
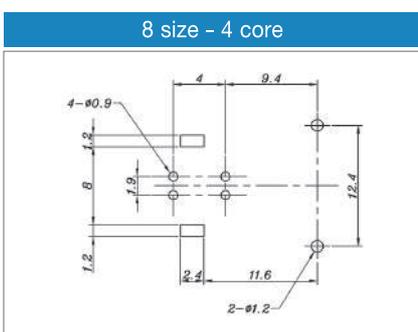
Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.



■ 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



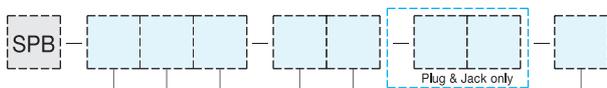
Features

- 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

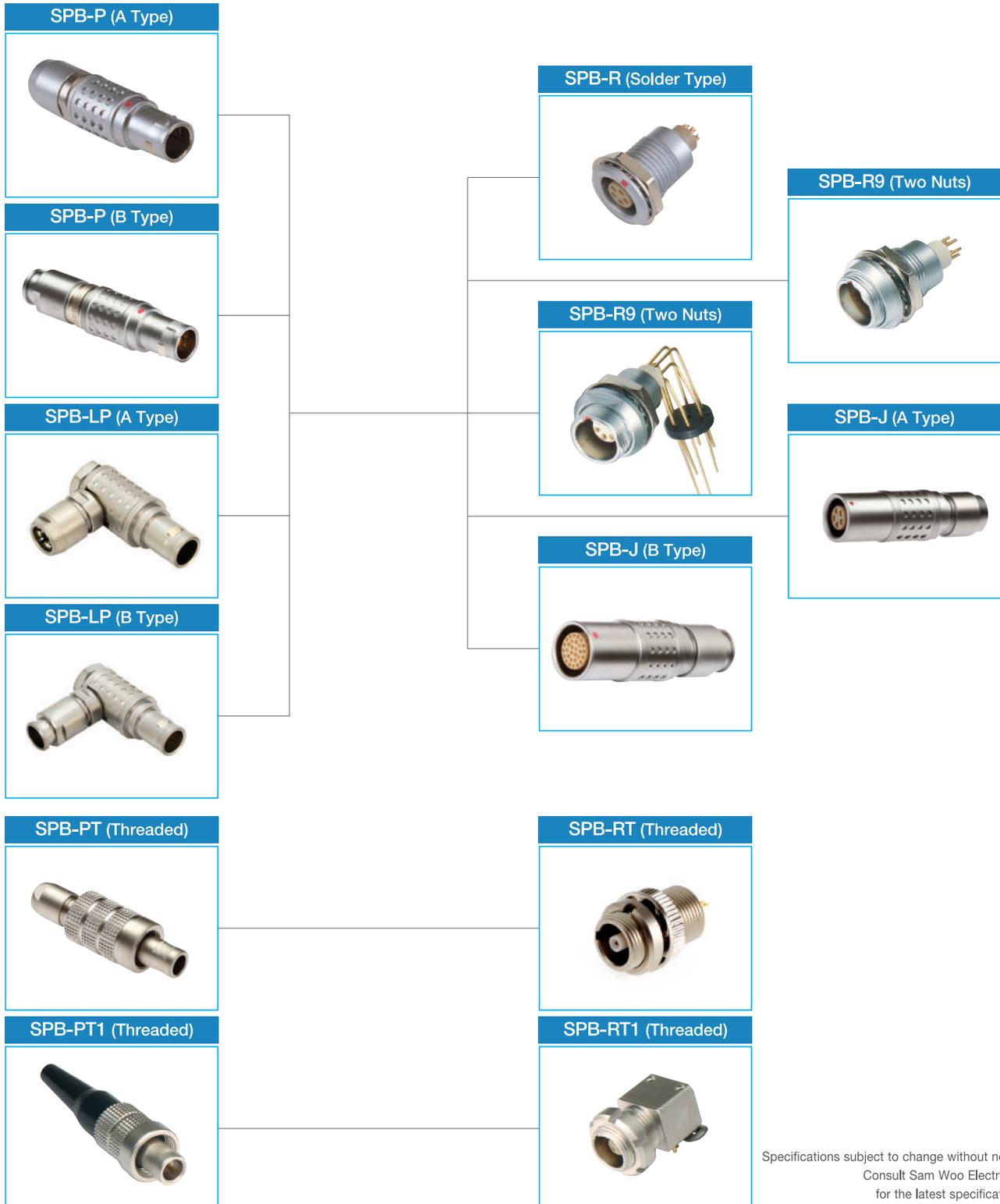
See page 66

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

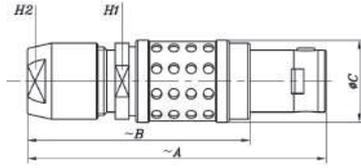
■ Mini-map



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

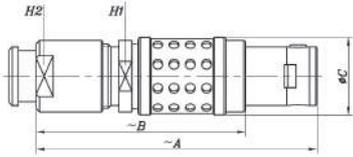
SP Series B Model Plug / Receptacle (Size & Shell Selection)

■ SPB Plug



Product Number	A	B	φC	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

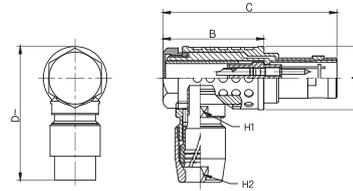
Material : Page 66
Collet code : Page 66
Contact code : Page 56



Product Number	A	B	φC	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

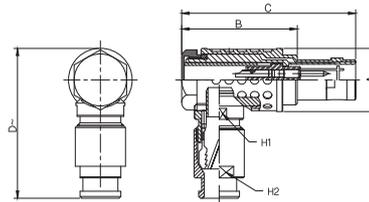
Material : Page 66
Collet code : Page 66
Contact code : Page 56

■ SPB Right-angle Plug



Product Number	φA	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					

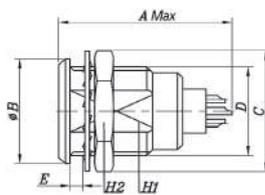
Material : Page 66
Collet code : Page 66
Contact code : Page 56



Product Number	φA	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					

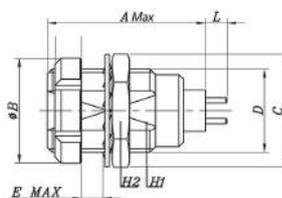
Material : Page 66
Collet code : Page 66
Contact code : Page 56

■ SPB Receptacle



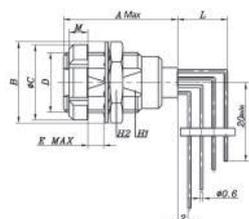
Product Number	A	φB	C	D	E	H1	H2
SPB-00 R S	15,5	8,0	10,3	M7×0,5P	5,5	6,3	9,0
SPB-0 R S	20,7	10,0	12,5	M9×0,6P	7,0	7,5	11,0
SPB-1 R S	23,0	14,0	16,0	M12×1,0P	7,5	10,5	14,0
SPB-2 R S	26,7	18,0	19,5	M15×1,0P	8,5	13,5	17,0
SPB-3 R S	30,7	22,0	25,0	M18×1,0P	11,5	16,5	22,0

Material : Page 66
Contact code : Page 56



Product Number	A	φB	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	φC	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

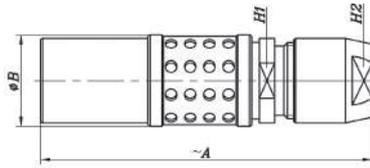
Material : Page 66
Contact code : Page 56

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

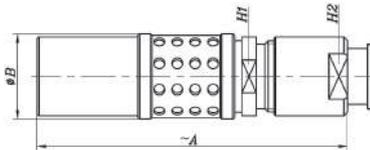
■ SPB Jack



SPB (A Type)



SPB (B Type)



Product Number						A	∅ B	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	∅ B	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

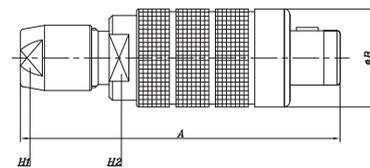
B Model Screw Mounting Plug / Receptacle

SP Series

■ SPB Plug (Threaded-mounting)



SPB (Cable Collet, 1 Key or 2 Key)

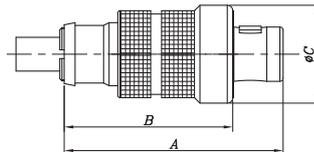


Product Number					A	∅ B	H1	H2
SPB	00	PT	P	A	29,2	9	5	6,5

Material : Page 66
Collet code : Page 66
Contact code : Page 56
key angles : Page 65
! Length (L) depends on numb



SPB (Crimp Type, 2 key)



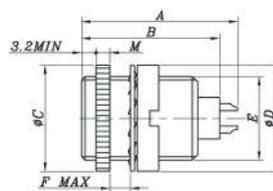
Product Number				A	B	C	
SPB	00	PT1	P	C	20,0	15,4	9,0

Material : Page 66
Collet code : Page 66
Contact code : Page 56
key angles : Page 65
! Length (L) depends on numb

■ SPB Receptacle (Threaded-mounting)



SPB(1 Key)

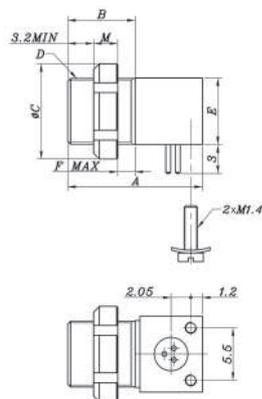


Product Number							A	B	C	∅ D	E	F	M
SPB	00	RT	S				15,5	13,7	9,5	9,0	M7×0,5P	4,2	2,0

Material : Page 66
Contact code : Page 56
! Length (L) depends on numb



SPB(2 Key)



Product Number							A	B	∅ C	D	E	F	M
SPB	00	RT1	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

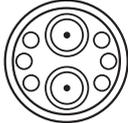
■ Contact Code

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

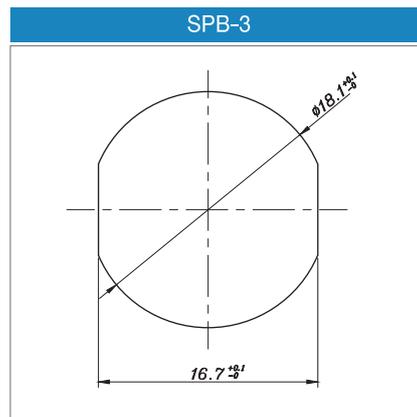
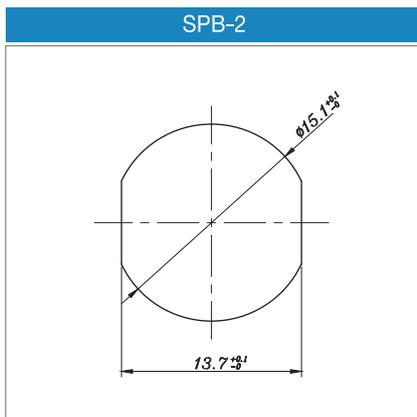
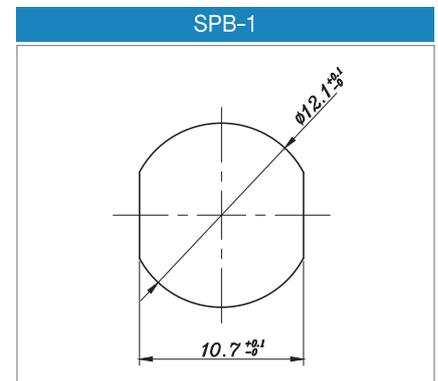
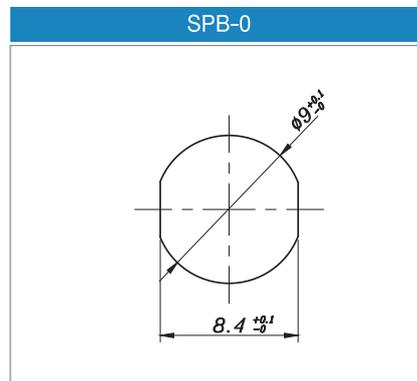
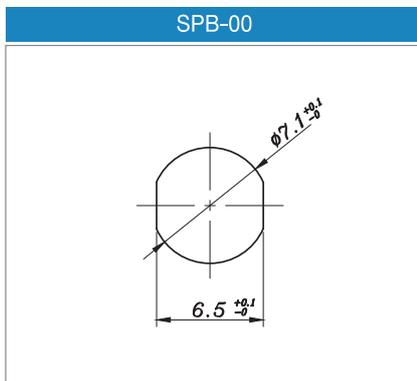
Note : Connector contact arrangement is from mating surface.

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.

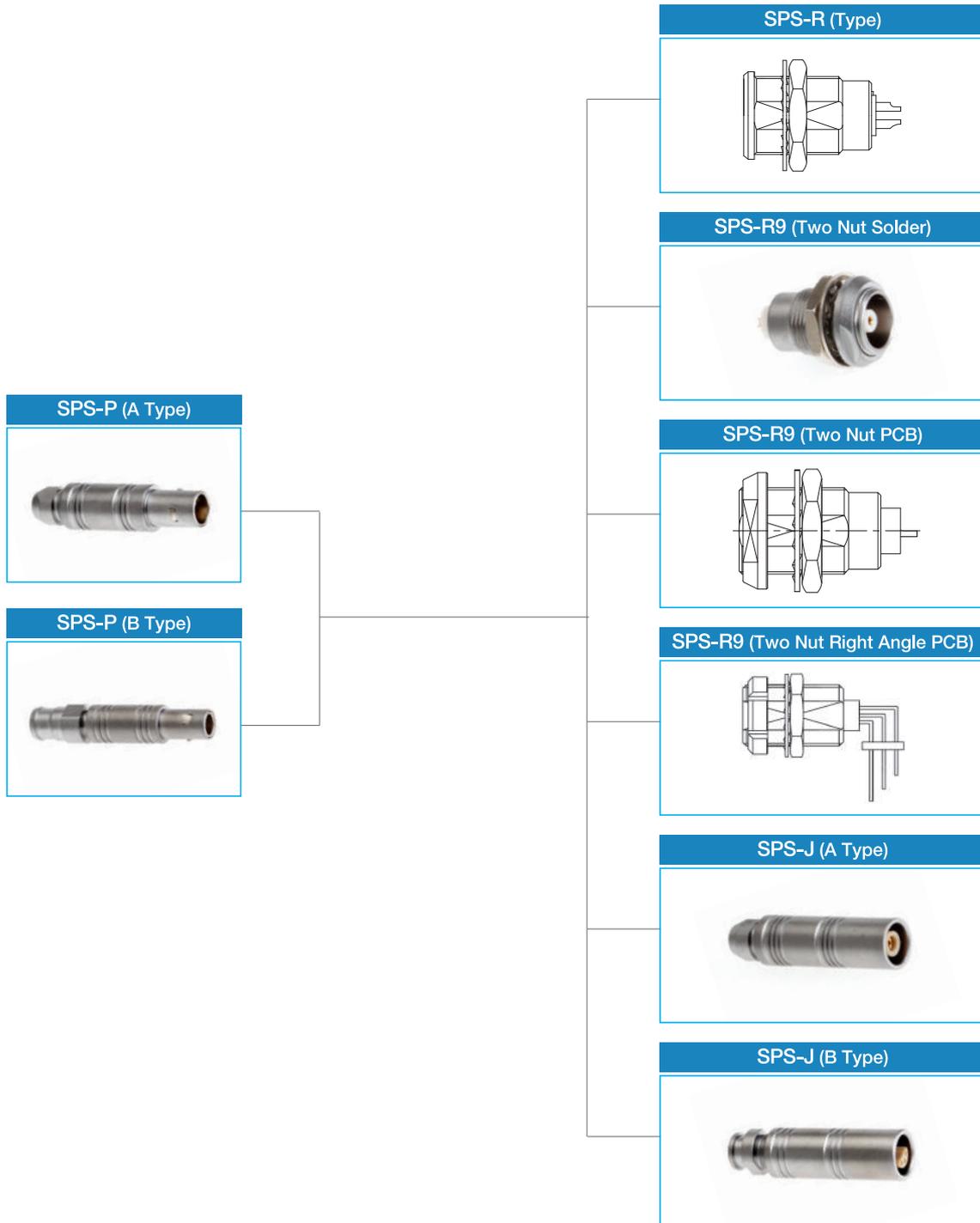
■ SPB Series Panel Layout



■ 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

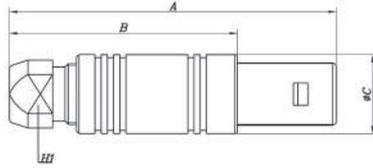
■ Mini-map



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

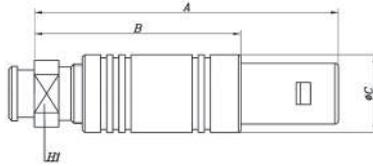
SP Series S Model Plug / Receptacle (Size & shell selection)

■ 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

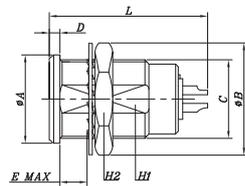
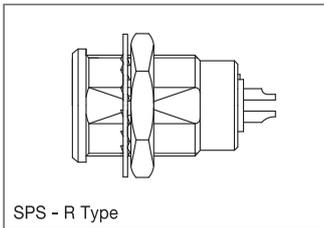
Material : Page 66
 Collet code : Page 66
 P : Male Contact SP : Female and Male Contact
 Contact code : Page 61



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

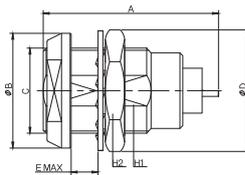
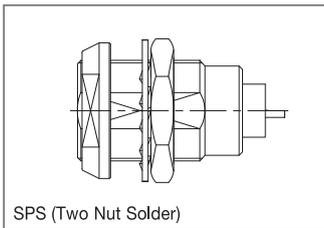
Material : Page 66
 Collet code : Page 66
 P : Male Contact SP : Female and Male Contact
 Contact code : Page 61

■ SPS Receptacle



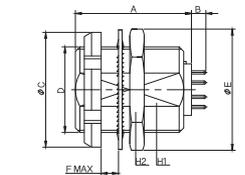
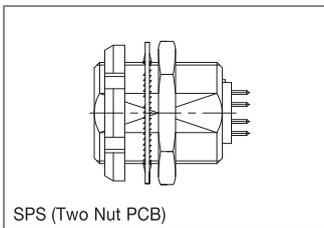
Product Number					A	φB	C	D	E	L	L ¹⁾	H1	H2
SPS	00	R			8	10,3	M7×0,5P	1,0	5,5	-	15,2	6,3	9
SPS	0	R			10	12,5	M9×0,6P	1,2	5,5	17,5	18,5	8,2	11
SPS	1	R			14	16,0	M12×1,0P	1,5	5,5	20,2	21,5	10,5	14
SPS	2	R			18	19,5	M15×1,0P	1,8	5,5	24,5	26,0	13,5	17
SPS	3	R			22	25,2	M18×1,0P	2,0	5,5	29,0	30,0	16,5	22

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



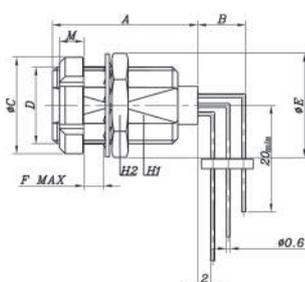
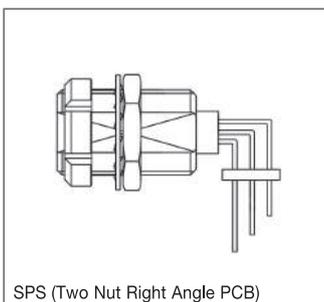
Product Number					A	φB	C	φD	E	H1	H2
SPS	0	R9			17,5	12,0	M9×0,6P	12,5	8,5	8,2	11,0
SPS	1	R9			20,2	16,0	M12×1,0P	16,0	10,0	10,5	14,0
SPS	2	R9			24,5	19,5	M15×1,0P	20,0	11,0	13,5	17,0
SPS	3	R9			29,0	24,0	M18×1,0P	25,2	14,0	16,5	22,0

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	R9			15,0	3,0	12,0	M9×0,6P	12,5	8,5	8,2	11,0
SPS	1	R9			17,5	3,0	16,0	M12×1,0P	16,0	10,0	10,5	14,0
SPS	2	R9			20,0	3,0	20,0	M15×1,0P	19,5	11,0	13,5	17,0
SPS	3	R9			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



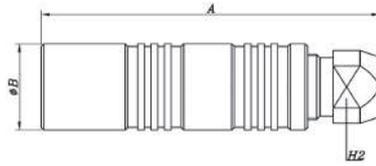
Product Number					A	B	φC	D	φE	F	H1	H2
SPS	0	R9										
SPS	1	R9										
SPS	2	R9										
SPS	3	R9										

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

Coming soon

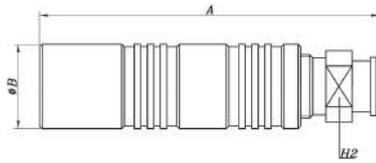
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SPS Jack



Product Number				A	ø 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	ø 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 ø	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		

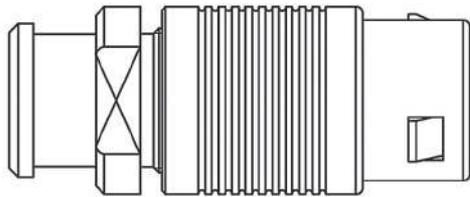
■ Contact Code (coaxial)

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	

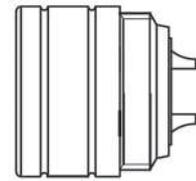
■ Contact Code (multi-contact)

Series & Model	Size	Contact Code	Current	Contact ø	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.

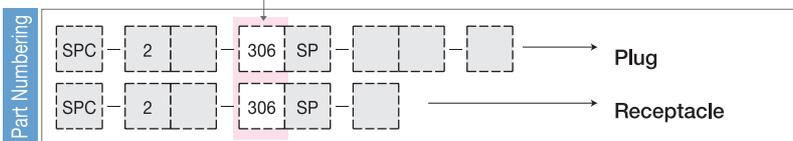
■ Mini-map



■ Contact Code

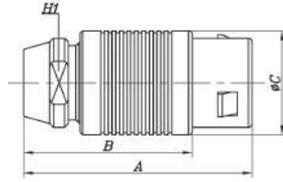
Series & Model	Size	Contact Code	Current	Contact ϕ	No. of Contacts	Wire Gauge (Maximum)	Contact Arrangement
SPC	2	306	12A	1,3	6	AWG20	

Note : Connector contact arrangement is from mating surface.



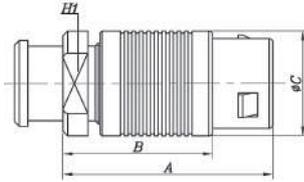
SP Series C Model Plug / Receptacle / Jack(Size & Shell Selection)

■ SPC Plug



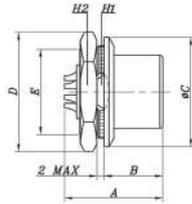
Product Number	A	B	ø C	H1
SPC 2 P 306 SP A 1	30	22	14	10,5

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

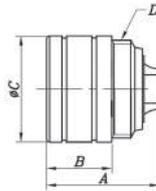
Material : Page 66
Collet code : Page 66



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

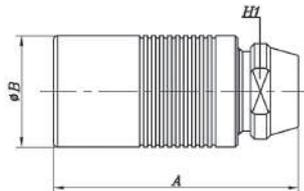
■ SPC Receptacle



Product Number	A	B	ø C	D
SPC 2 R3 306 SP	14,2	8,5	14,0	M13×0,75P

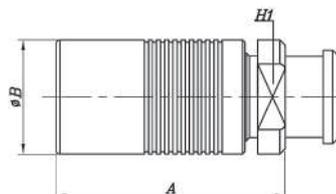
Material : Page 66

■ SPC Jack



Product Number	A	ø B	H1
SPC 2 J 306 SP A 1	28	14	1,5

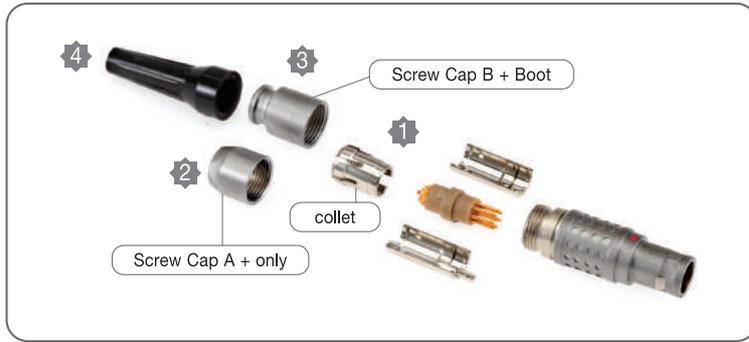
Material : Page 66
Collet code : Page 66



Product Number	A	ø B	H1
SPC 2 J 306 SP B 1	26,4	14	12

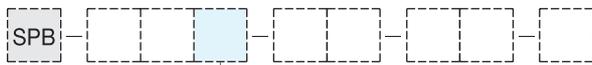
Material : Page 66
Collet code : Page 66

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



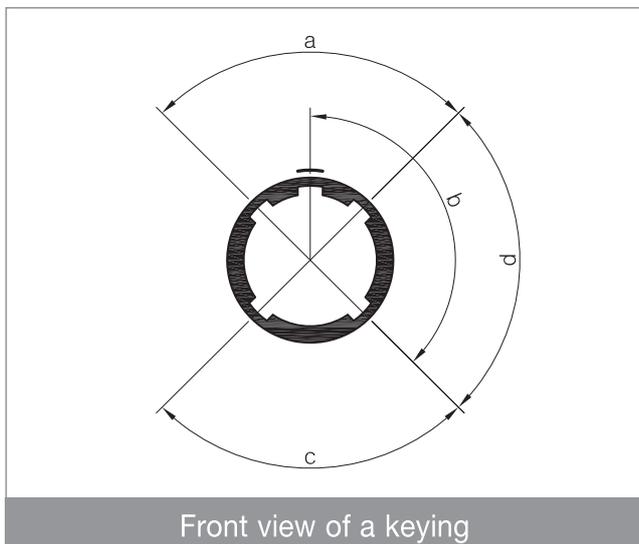
- 1) Collet
 - 2) Screw Cap A
 - 3) Screw Cap B
 - 4) Boot
- Screw Cap B + Boot

■ 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 (SFP)		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

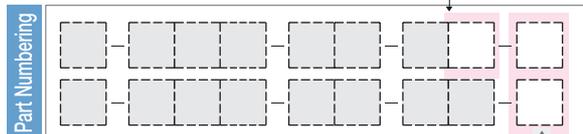
Collet Code Information

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	●	●		
3	D92	9,2	8,6	9,0	8,1	●	●			
	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	●	●			
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				



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



■ Part Numbering

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



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

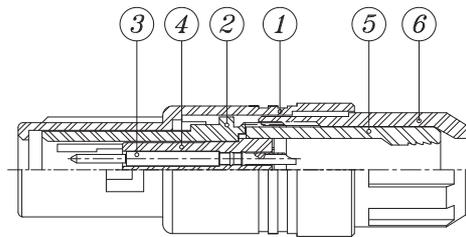
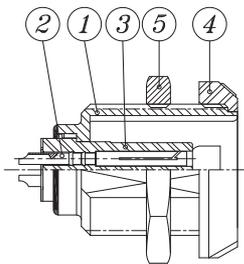
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ 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℃	-

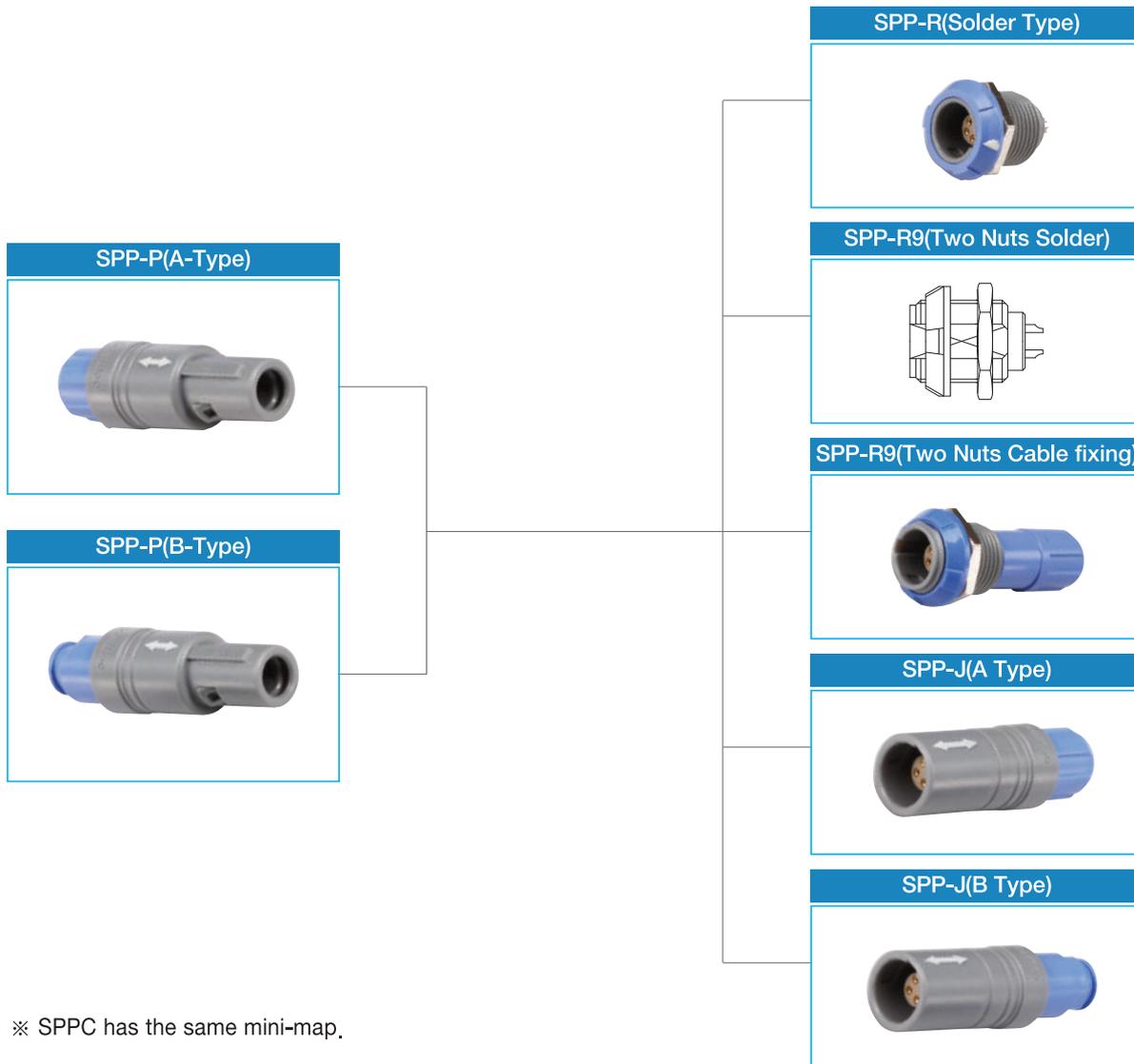
■ Standard Model

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



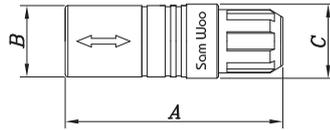
- Straight Plug
- ① Body
 - ② Latch sleeve
 - ③ Male contact
 - ④ Insulator
 - ⑤ Collet
 - ⑥ Screw cap

■ Mini-map



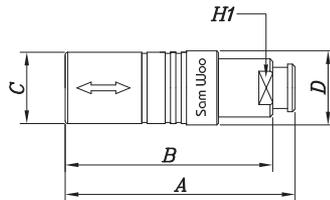
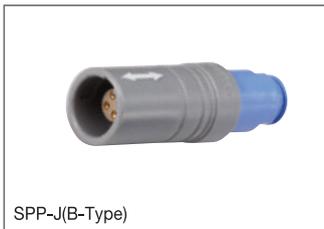
※ SPPC has the same mini-map.

■ SPP 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	

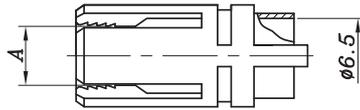
Note : Connector contact arrangement is from solder pot.

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

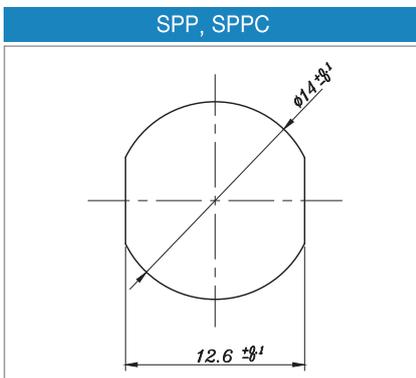
Material Code Instruction

Plug + Male Contact : Code 1, 2, 4

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

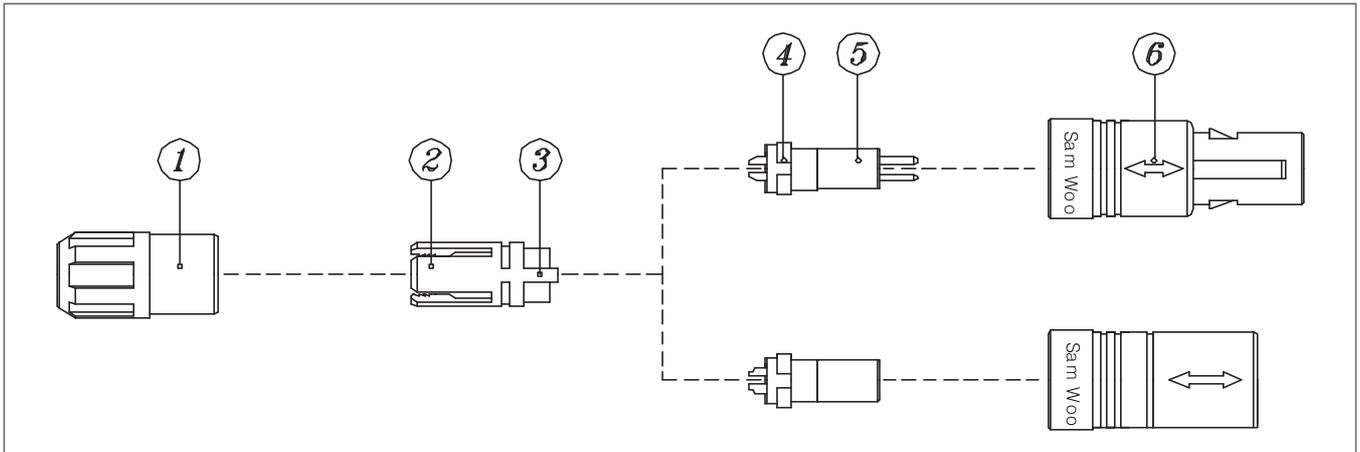
Jack + Female Contact : Code 1, 2, 3, 4

■ SPP, SPPC Series Panel Layout



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

■ Solder contacts



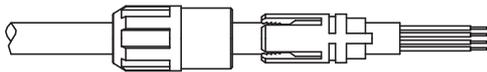
1.



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

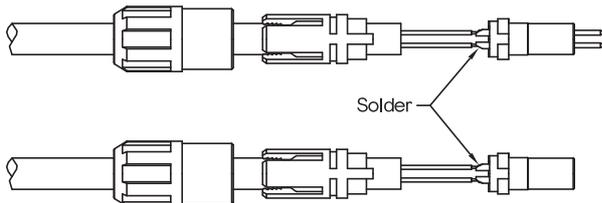
Configuration	Dimensions(mm)	
	A	B
302	14,0	4,0
304, 305	13,0	3,0
306 to 314	12,5	2,5

2.



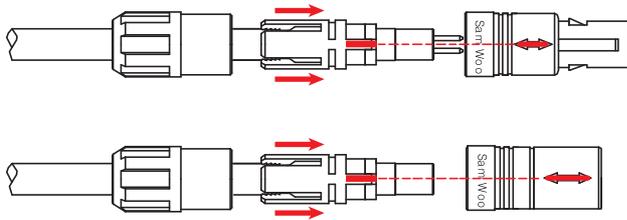
2. Slide the screw cap ① and then the collet ② onto the cable.

3.



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

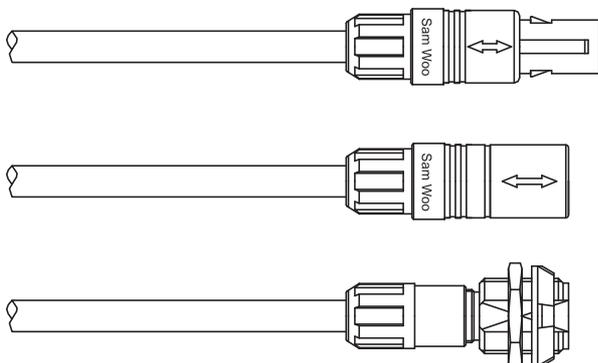
4.



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.

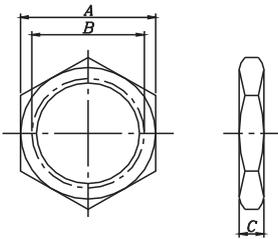


5. Completion

■ **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

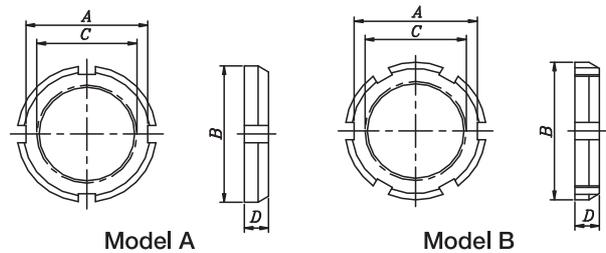
■ **Hexagonal Nut**



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**

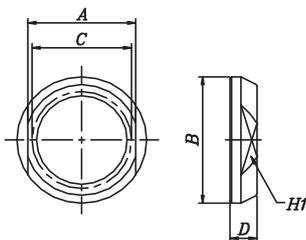
► **Optional Nut**



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**

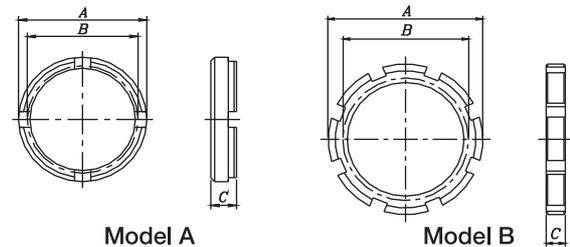
► **Optional Nut**



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

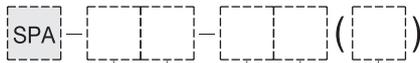
■ **3. Round Nuts**

► **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	6,5	30	7,0	6,5		
SPA-2B-BK40	2	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.



■ **Part Numbering**

■ **Plug Cable Assembly**



■ **Receptacle Cable Assembly**



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



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

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

※ Design and Customization Service Available

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

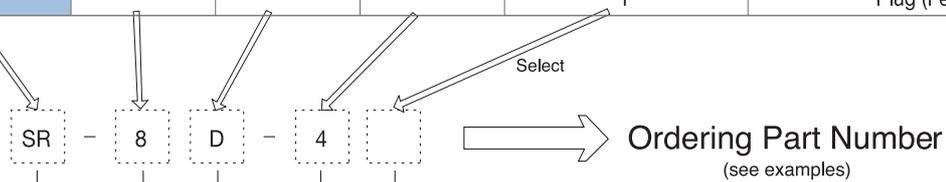
- Protection rating of IP67 with over molding
- M12 threaded locking

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

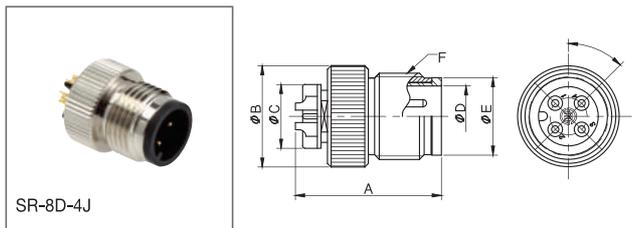
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

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	<table border="1"> <thead> <tr> <th></th> <th>Male</th> <th>Female</th> </tr> </thead> <tbody> <tr> <td>DC type</td> <td></td> <td></td> </tr> </tbody> </table>		Male	Female	DC type		
		Male	Female				
DC type							
Note : Figure Male No.							

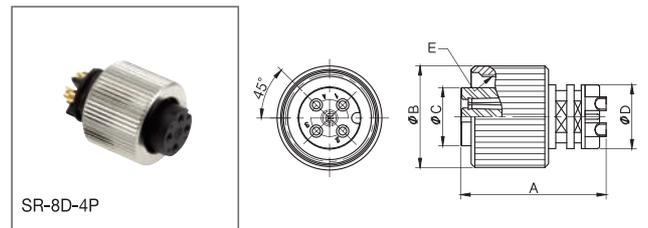
- ¹ Withstanding voltage is the tested voltage value in this table.
- ² Insulation resistance is measured at DC 100V.
- ³ Contact resistance is measured at DC 1A.
- Values are from tested items and may not apply to all connectors.
- Specifications subject to change without notice.
- Consult Sam Woo Electronics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



■ Cable Assembly With Jack Connector

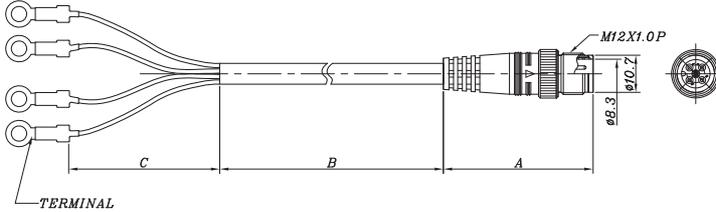


Unit : mm

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,

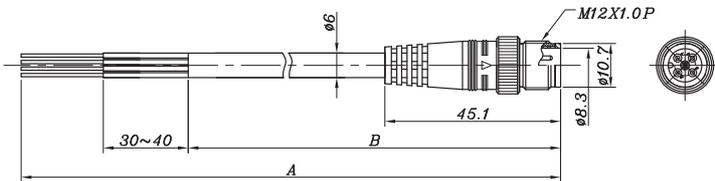


SW-4367 / Jack Connector

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

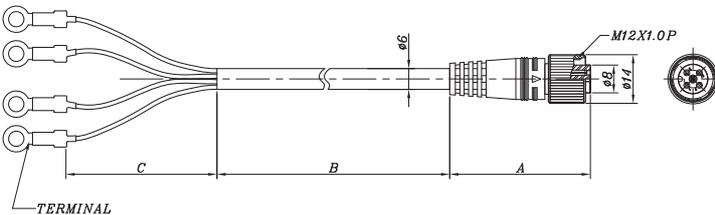


Unit : mm

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,

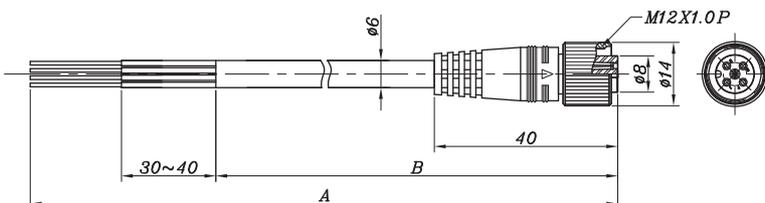


SW-4119 / Plug Connector

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

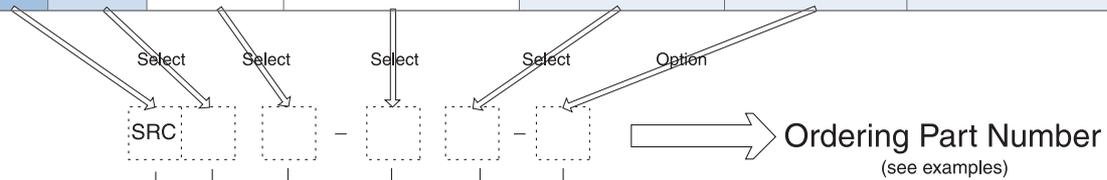
- Bayonet Locking System
- Rugged
- Light-weight
- Low cost
- General purpose

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

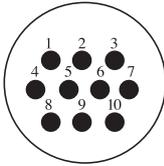
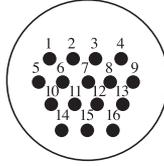
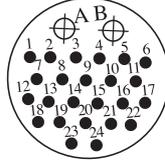
SRC series Round Adapter - Size 21 Adapter - 26 Male & Female Contact

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

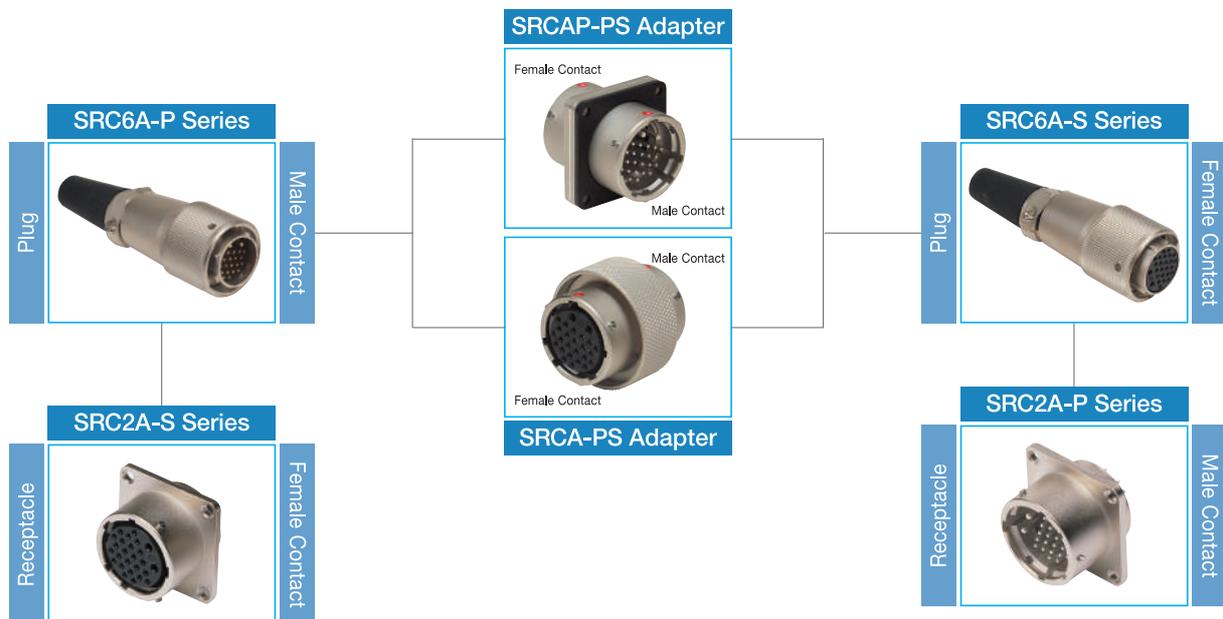
Performance	Size / No. of Contacts	Size 21		
		10	16	26
Withstanding Voltage (per min) ¹		AC 1000V	AC 1000V	AC 1000V
Current		10A	5A	5A / 10A
Insulation Resistance (Minimum) ²		1,000M Ω	1,000M Ω	1,000M Ω
Contact Resistance (Maximum) ³		5m Ω	5m Ω	5m Ω
Solder Pot Inside Diameter		∅ 1,5	∅ 1,0	∅ 1,0 / ∅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

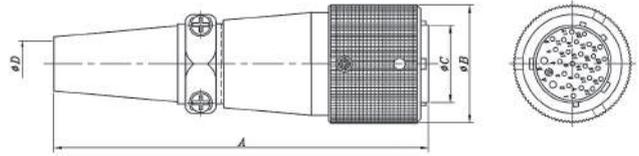
SRC Series Mini-map



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	φ B	φ C	φ 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

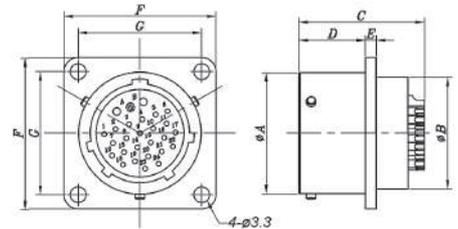


Product Number	A	φ B	φ C	φ D
SRC6A21-10S	98,0	31,0	20,4	12,2
SRC6A21-16S				
SRC6A21-26S				
SRC6A21-10S-G				
SRC6A21-16S-G				
SRC6A21-26S-G				

■ SRC2A Receptacle



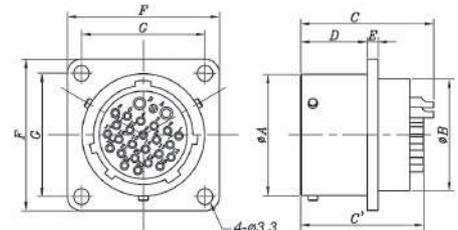
Product Number	φ A	φ B	C	D	E	F	G
SRC2A21-10P	25,6	23,6	26,4	14	2,3	32	26
SRC2A21-16P							
SRC2A21-26P							
SRC2A21-10P-G							
SRC2A21-16P-G							
SRC2A21-26P-G							



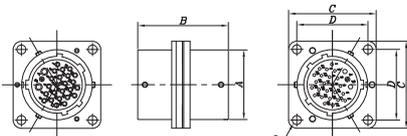
■ SRC2A Receptacle



Product Number	φ A	φ 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							

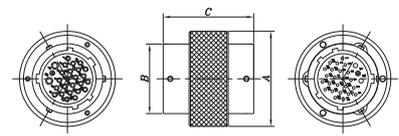


■ SRCAP Adapter (Panel, Male to Female)



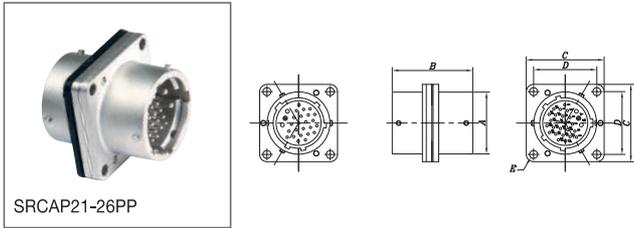
Product Number	φ A	B	C	D	E
SRCAP21-10PS	25,6	33	32	26	4-φ 3,3
SRCAP21-16PS					
SRCAP21-26PS					
SRCAP21-10PS-G					
SRCAP21-16PS-G					
SRCAP21-26PS-G					

■ SRCA Adapter (Round, Male to Female)



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

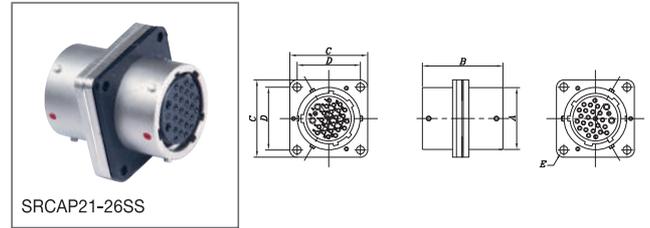
■ SRCAP Adapter (Panel, Male to Male)



SRCAP21-26PP

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					

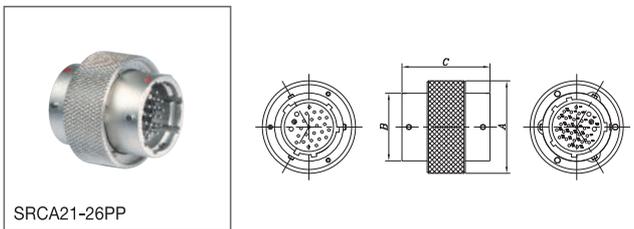
■ SRCAP Adapter (Panel, Female to Female)



SRCAP21-26SS

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					

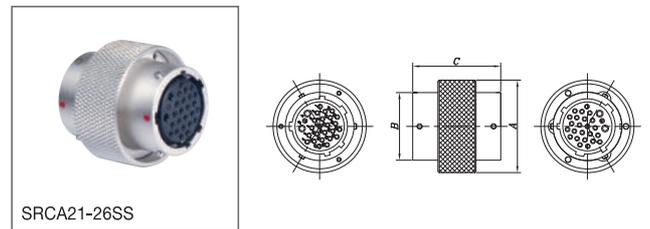
■ SRCA Adapter (Round, Male to Male)



SRCA21-26PP

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)



SRCA21-26SS

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.



ST Series Part Numbering



Features

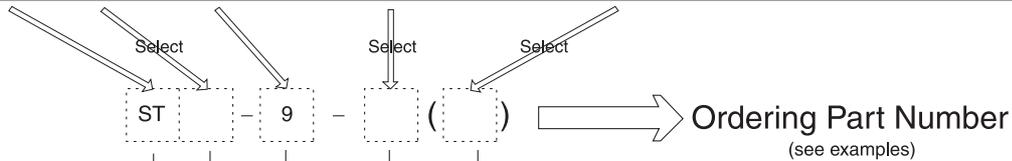
- Super-miniature size with multiple contact
- Safe insert system preventing male damage

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	STA Series (Adapter for ST series)				
	HA	STHA Series (Adapter for STH series)				
A	9A	12,16,20	P	Push-pull	Main ST series Plug	
			R/RPCB		ST Receptacle	
						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

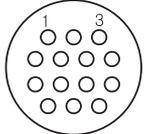
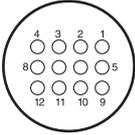
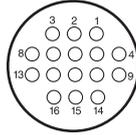
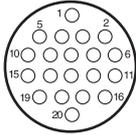
- 12,14,16,20

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			\varnothing 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			\varnothing 0,5	\varnothing 0,5	\varnothing 0,5
Wire Gauge (Maximum)			AWG28	AWG28	AWG28
Contact Arrangement			 Receptacle	 Receptacle	 Receptacle

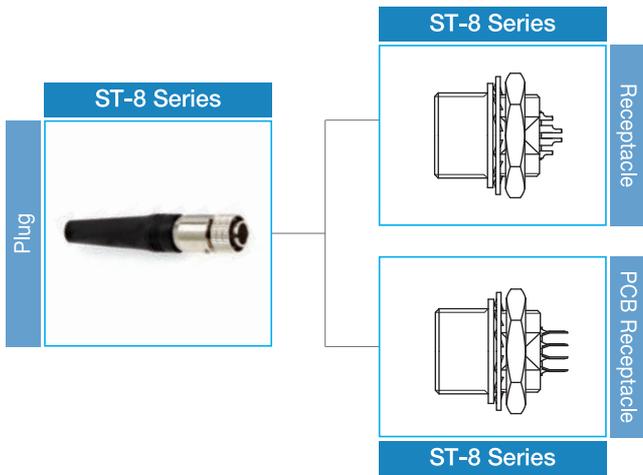
¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
 • Specifications subject to change without notice.
 • Consult Sam Woo Electronics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

■ Material Used / Finish

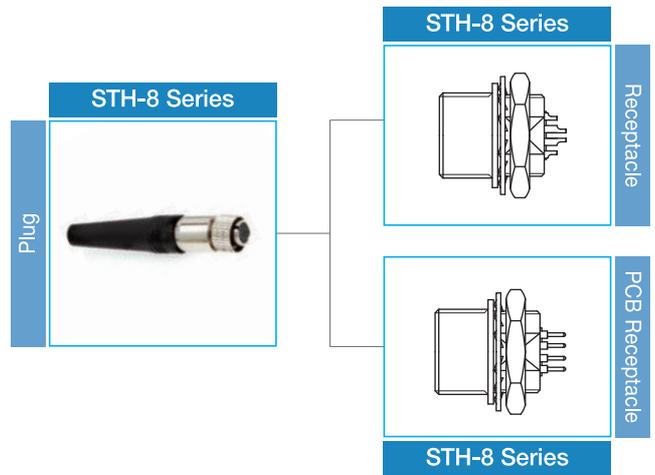
	Material	Finish
Body	Brass & Zinc alloy	Ni Plating
Insulator	PPS resin	Black
Contacts	Male	Phosphor bronze and Beryllium
	Female	Phosphor bronze

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

■ ST-8 Series



■ STH-8 Series



■ ST-8B Series



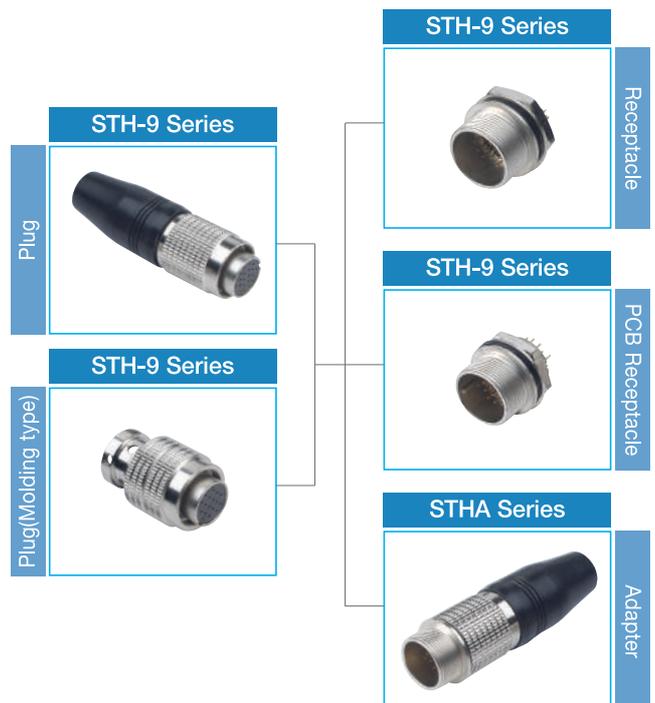
■ STH-8B Series



■ ST-9 Series

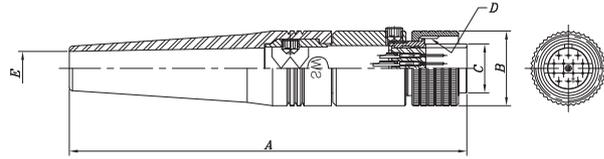


■ STH-9 Series



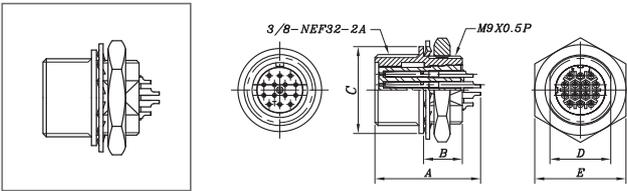
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ ST-8 Plug



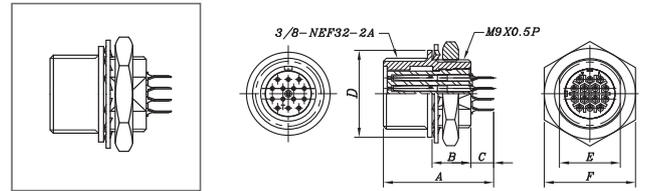
Product Number	A	B	C	D	E
ST-8-14(P)	58	11	7,2	3/8-32NEF-2B	5

■ ST-8 solder Type Receptacle



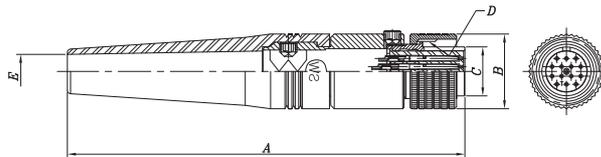
Product Number	A	B	C	D	E
ST-8-14(R)	13,9	5,1	11,5	8	12

■ ST-8 PCB Type Receptacle



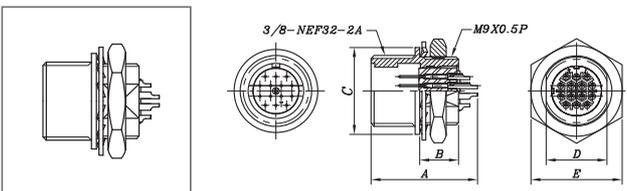
Product Number	A	B	C	D	E	F
ST-8-14(RPCB)	14,5	5,1	3	11,5	8	12

■ STH-8 Plug



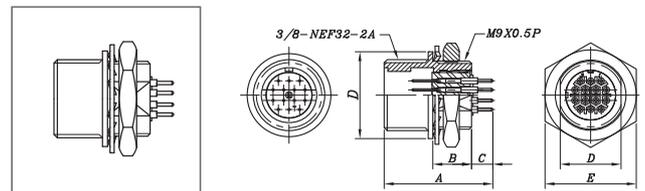
Product Number	A	B	C	D	E
STH-8-14(P)	58	11	7,2	3/8-32NEF-2B	5

■ 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



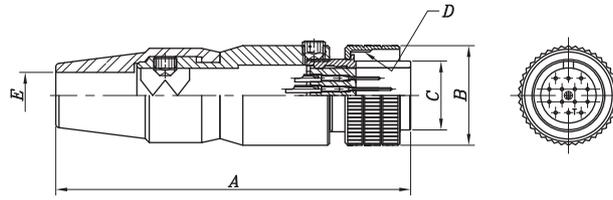
Product Number	A	B	C	D	E	F
STH-8-14(RPCB)	14,3	5,1	2,8	11,5	8	12

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

ST-8B Series

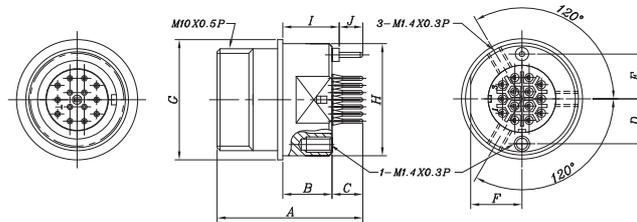
Screw-on Type Male / Female Plug, Receptacle

ST-8B Plug



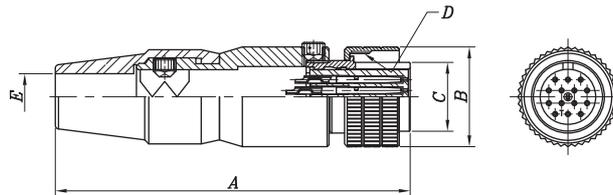
Product Number	A	B	C	D	E
ST-8B-14(P)	38,9	11	7,6	M14×1,0P	5,1

ST-8B Receptacle



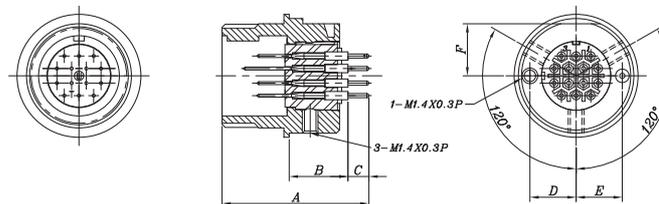
Product Number	A	B	C	D	E	F	G	H	I	J
ST-8B-14(RGPCB)	14,2	4,8	3	4,4	4,4	5	11,8	10,95	5,5	2,3

STH-8B Plug



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

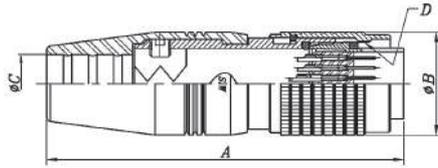
STH-8B Receptacle



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

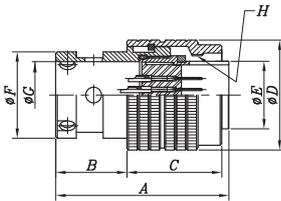
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ ST-9 Plug



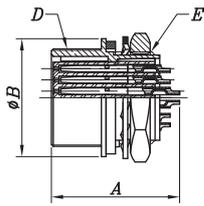
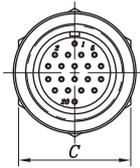
Product Number	A	Ø B	Ø C	D
ST-9-12(P)	43,0	12,5	7,0	M10,5×0,5P
ST-9-16(P)				
ST-9-20(P)				

■ ST-9 Molding Type Plug



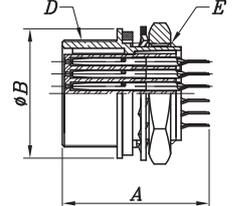
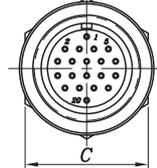
Product Number	A	B	C	Ø D	Ø E	Ø F	Ø G	H
ST-9-12(PLM1)	22	9	12	14	8,6	11	8,5	M10,5×0,5P
ST-9-16(PLM1)								
ST-9-20(PLM1)								

■ ST-9 Solder Type Receptacle



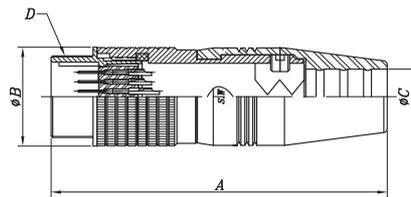
Product Number	A	Ø B	C	D	E
ST-9-12(R)	13,6	12,6	12,0	M10,5×0,5P	M10×0,75P
ST-9-16(R)					
ST-9-20(R)					

■ ST-9 PCB Type Receptacle



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

■ STA-9 Adapter

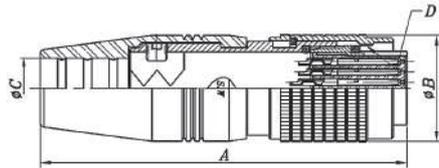


Product Number	A	Ø B	Ø C	D
STA-9-12	42,6	12,6	7,0	M10,5×0,5P
STA-9-16				
STA-9-20				

ST-9 Series

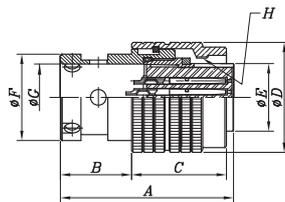
Screw-on type Male / Female Plug, Receptacle, Adapter

■ STH-9 Plug



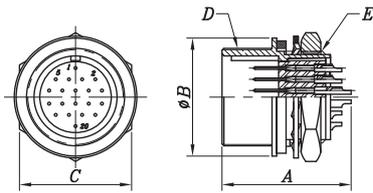
Product Number	A	∅ B	∅ C	D
STH-9-12(P)				
STH-9-16(P)	43,0	12,5	7,0	M10,5×0,5P
STH-9-20(P)				

■ STH-9 Molding Type Plug



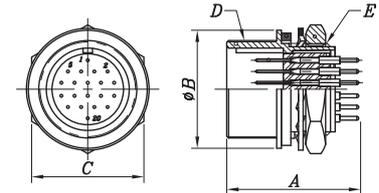
Product Number	A	B	C	∅ D	∅ E	∅ F	∅ G	H
STH-9-12(PLM1)								
STH-9-16(PLM1)	22	9	12	14	8,6	11	8,5	M10,5×0,5P
STH-9-20(PLM1)								

■ STH-9 Solder Type Receptacle



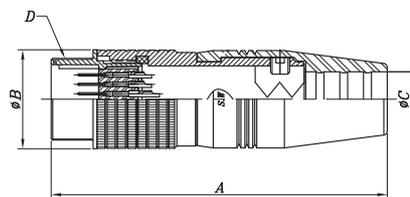
Product Number	A	∅ B	C	D	E
STH-9-12(R)					
STH-9-16(R)	13,6	12,6	12,0	M10,5×0,5P	M10×0,75P
STH-9-20(R)					

■ 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)					

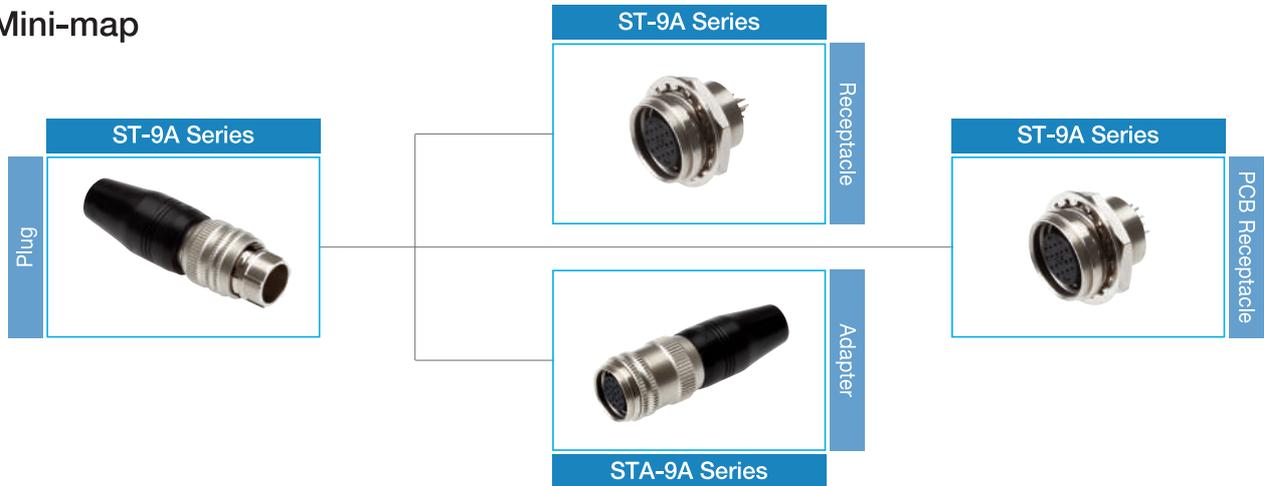
■ STHA-9 Adapter



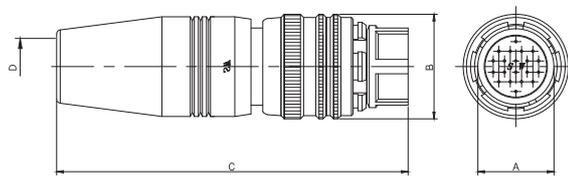
Product Number	A	∅ B	∅ C	D
STHA-9-12				
STHA-9-16	42,6	12,6	7,0	M10,5×0,5P
STHA-9-20				

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

■ Mini-map

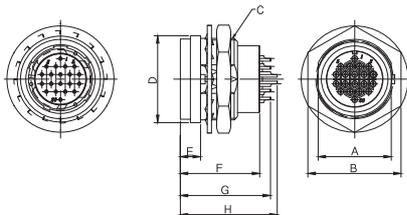


■ ST-9A Plug



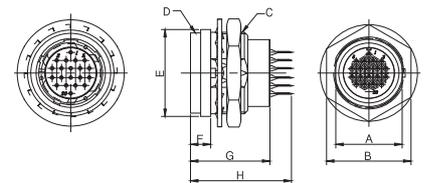
Product Number	∅ A	∅ B	C	∅ D
ST-9A-12(P)	9,4	13	(43,4)	7
ST-9A-16(P)				
ST-9A-20(P)				

■ ST-9A Receptacle



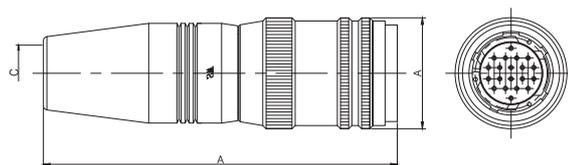
Product Number	A	B	C	∅ D	E	F	G	H
ST-9A-12(R)	11	14	M12×0,75P	13	3	11,8	13,4	14,4
ST-9A-16(R)								
ST-9A-20(R)								

■ 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)			

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

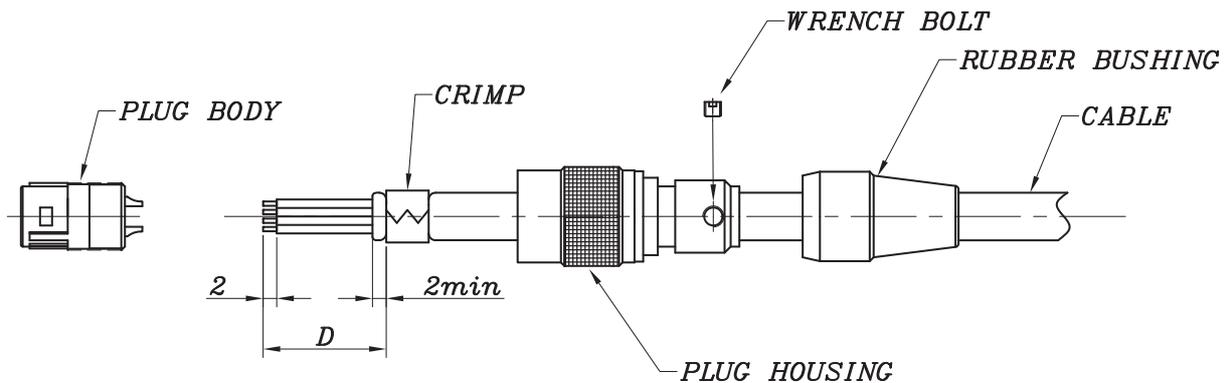


Table 1

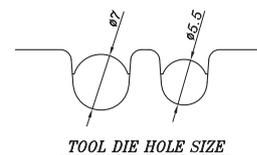
unit : mm

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)

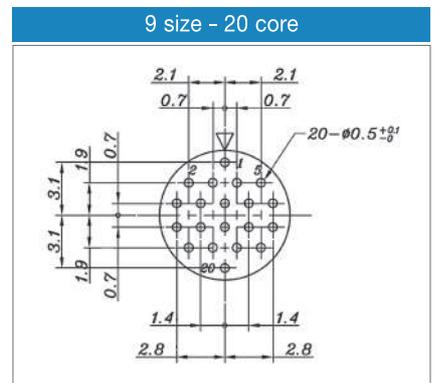
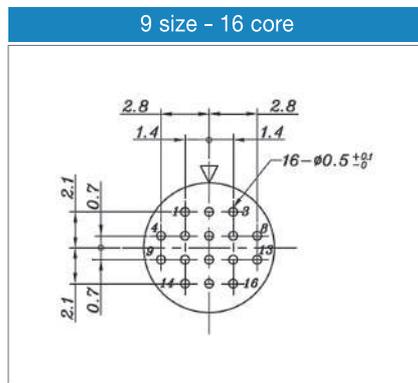
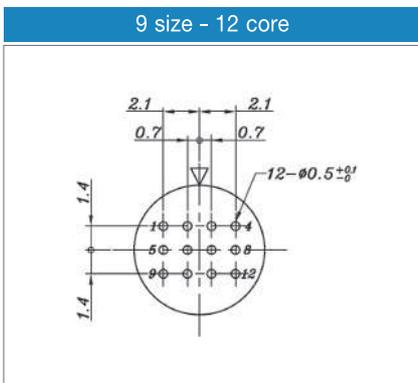
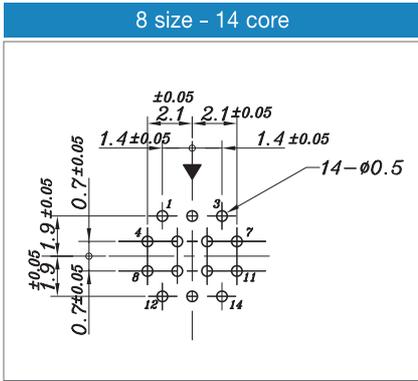


Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.

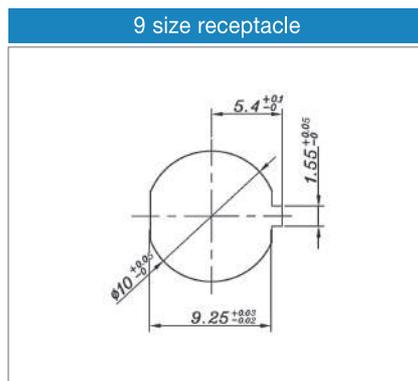
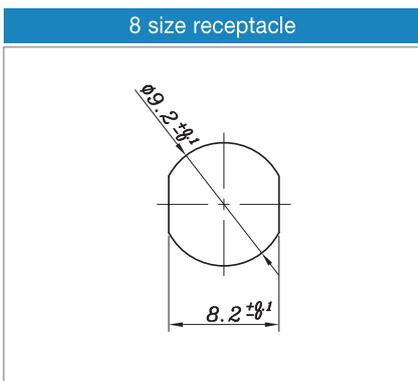


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ ST Receptacle PCB Hole Layout



■ ST Receptacle Panel Layout





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.





Features

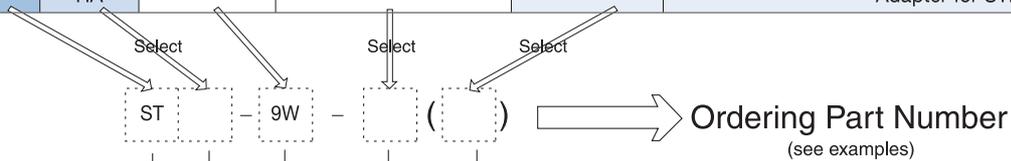
- Super-miniature size with multiple contact
- Safe insert system preventing pin damage
- Protection rating of IP67 with over molding

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

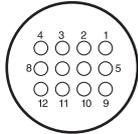
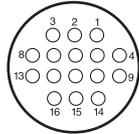
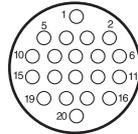
ST - 9W - 12 (P)
 ST IP67 Series - Size 9 Plug -12 Male Contact

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
	Female	Phosphor bronze

ST IP67 Series Mini-map

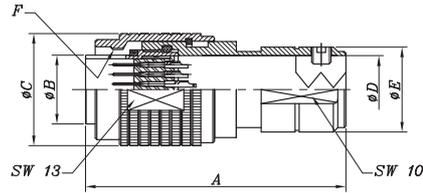
ST-9W IP67 Series		STH-9W IP67 Series	
			
			
			

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

ST IP67 Series

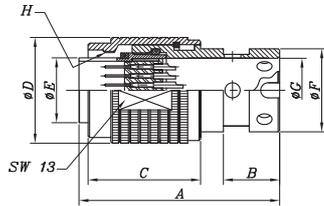
Male Plug, Female Receptacle / Adapter

■ ST-9W Plug



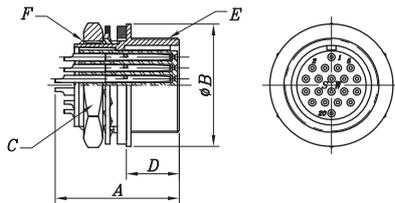
Product Number	A	ϕB	ϕC	ϕD	ϕE	F
ST-9W-12(P)						
ST-9W-16(P)	32,3	8,6	14	8,5	10,6	M10,5×0,5P
ST-9W-20(P)						

■ ST-9W Molding Type Plug



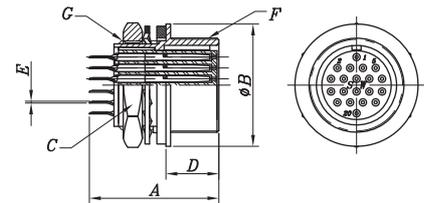
Product Number	A	B	C	ϕD	ϕE	ϕF	ϕG	H
ST-9W-12(PLM)								
ST-9W-16(PLM)	26,4	7,4	14,8	14	8,6	11	8,5	M10,5×0,5P
ST-9W-20(PLM)								

■ ST-9W Solder Type Receptacle



Product Number	A	ϕB	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)						

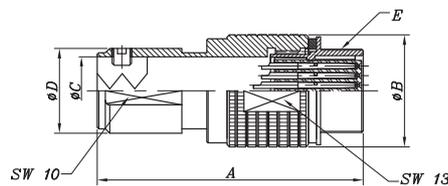
■ ST-9W PCB Type Receptacle



Product Number	A	ϕB	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

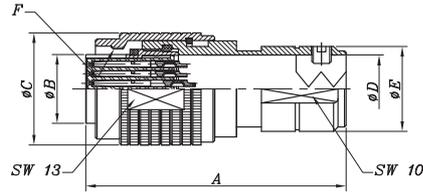
Product Number	A	ϕB	ϕC	ϕD	E
STA-9W-12					
STA-9W-16	33	14	8,5	10,6	M10,5×0,5P
STA-9W-20					



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

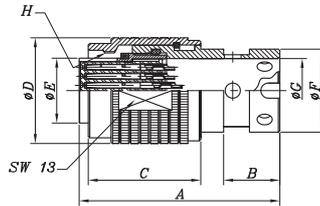
■ STH-9W Plug

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)						

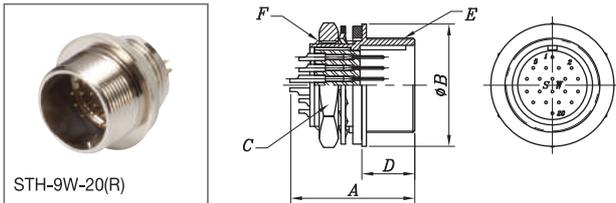


■ STH-9W Molding Type Plug

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)								

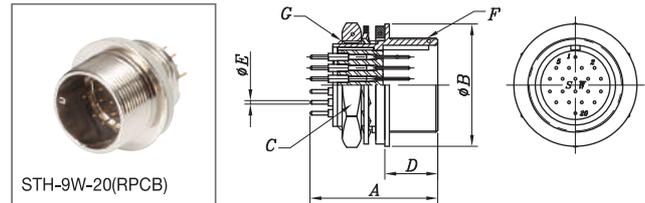


■ STH-9W Solder Type Receptacle



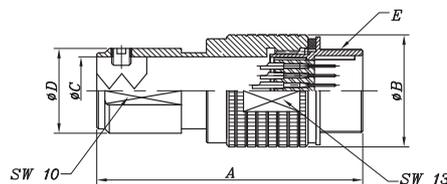
Product Number	A	∅B	C	D	E	F
STH-9W-12(R)						
STH-9W-16(R)	13,6	13,5	12	5,9	M10,5×0,5P	M10×0,75P
STH-9W-20(R)						

■ 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					

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

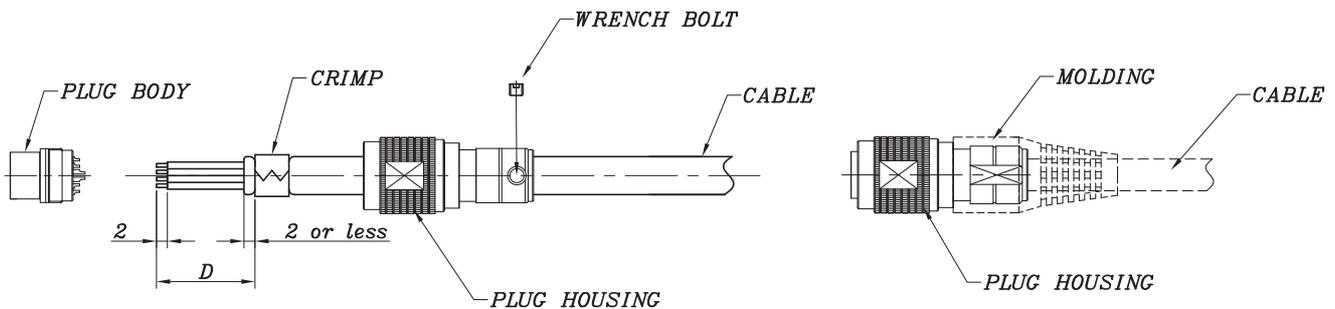


Table 1

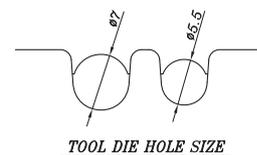
unit : mm

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)

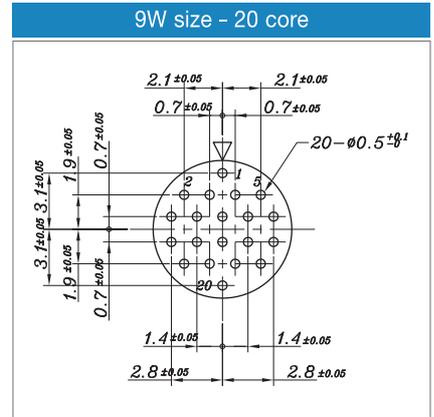
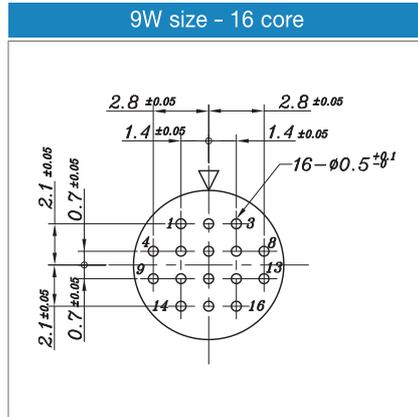
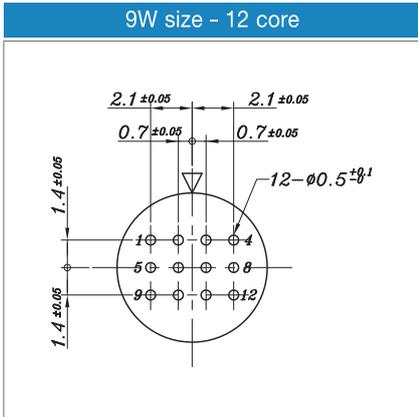


Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.

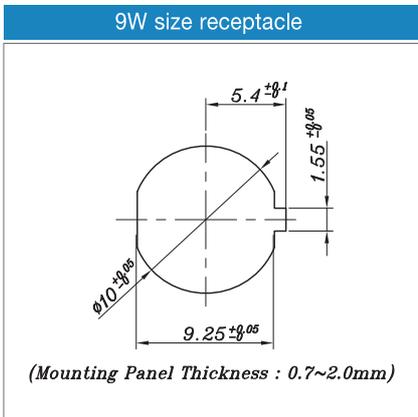


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ Receptacle PCB Hole Layout



■ Receptacle Panel Layout





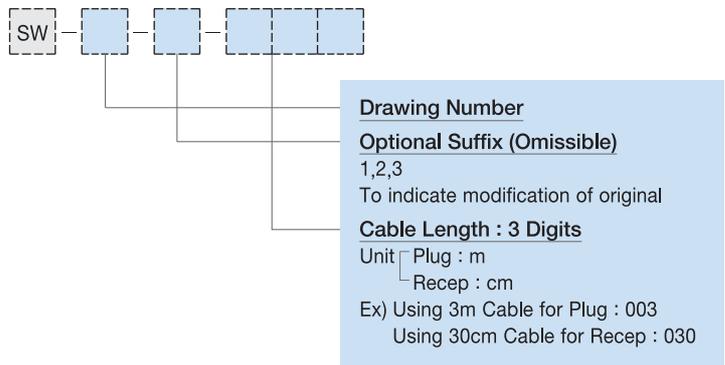
Features

- 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**



■ **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

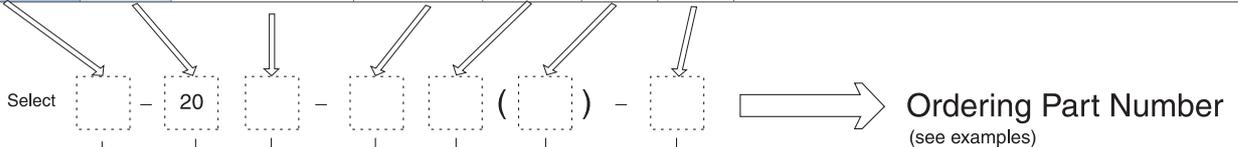
- Safe connection / Easy mounting
- Antenna Interface Standards Group(AISG) Specification
- Electromagnetic Protection
- Protection rating of IP67
- UL Recognized 
- IEC 61076-2-106 and AISG Specification

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		S			Plug (Female Contact)
		SBR		S	●		Receptacle (Female Contact)
		SBR1		S	●	●	Receptacle (Female Contact)
		BR		P	●	●	Receptacle (Male Contact)
		SRB		S	●	●	Receptacle (Female Contact, Rear mount)
		SPR		S	●	●	Receptacle (Female Contact, Flange type)
		SPR2					
		SPR5					
		PR		P	●	●	Receptacle (Male Contact, Flange type)
		PR3					
		PR6		P	●	●	Receptacle (Male Contact, Long Flange type)



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

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

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		ø 4 ~ ø 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

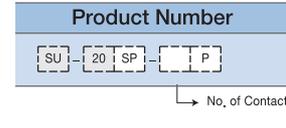
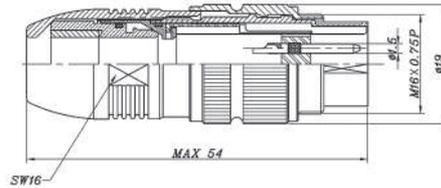


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

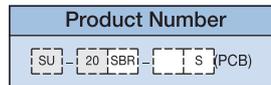
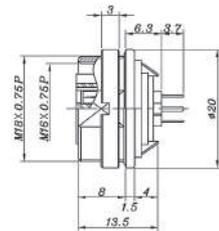
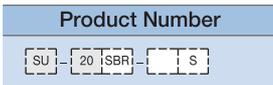
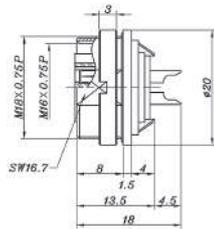


SU Series Plug, Receptacle(Solder / PCB type)

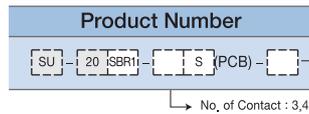
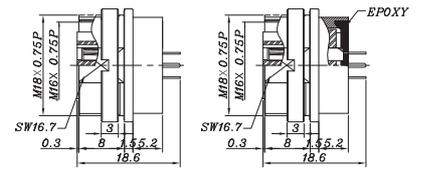
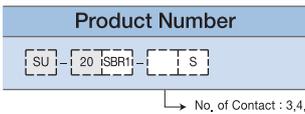
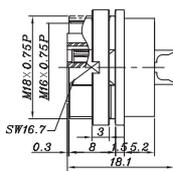
■ SU-20SP Series



■ SU-20SBR Series | Bulkhead

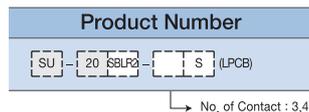
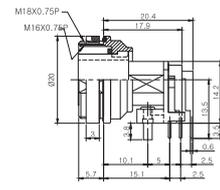
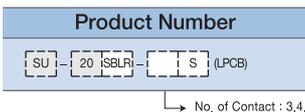
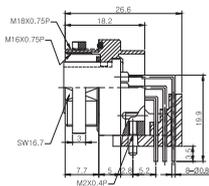


■ SU-20SBR1 Series | Bulkhead, Potting



With Epoxy

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

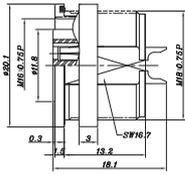


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SU-20SRB Series | Rear mount



SU-20SRB-8S



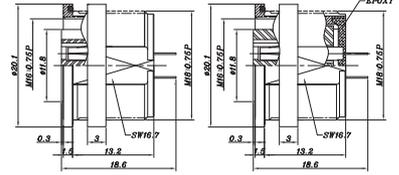
Product Number

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) -

Potting option
1, Silicon 2, Epoxy

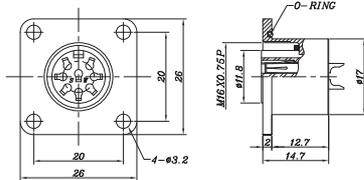
No. of Contact : 3,4,5,6,8,12,14

With Epoxy

■ SU-20SPR Series | Flange, Potting



SU-20SPR-8S



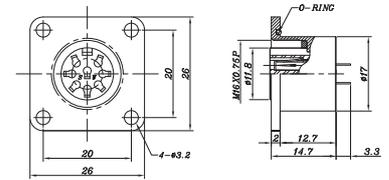
Product Number

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) -

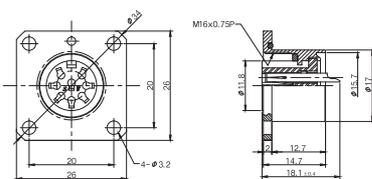
Potting option
1, Silicon 2, Epoxy

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

With Epoxy



SU-20SPR2-8S



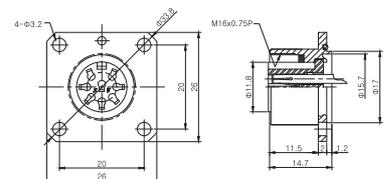
Product Number

SU - 20 SPR2 - S

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



SU-20SPR5-8S



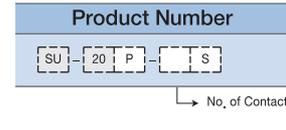
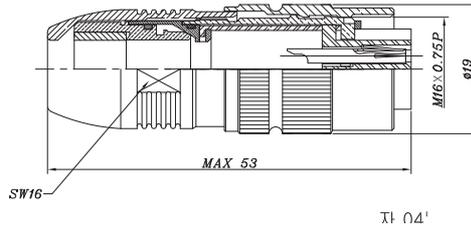
Product Number

SU - 20 SPR5 - S

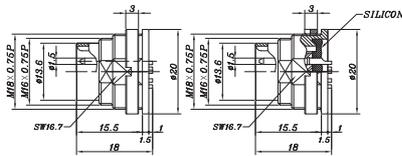
No. of Contact : 3,4,5,6,8,12,14

SU Series Plug, Receptacle(Solder / PCB type)

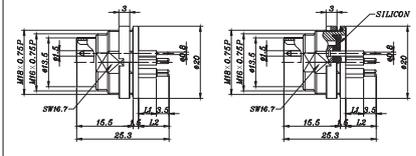
■ SU-20P Series



■ SU-20BR Series | Bulkhead, Potting



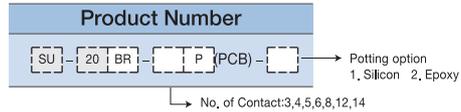
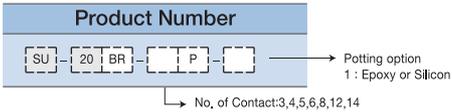
With Silicon



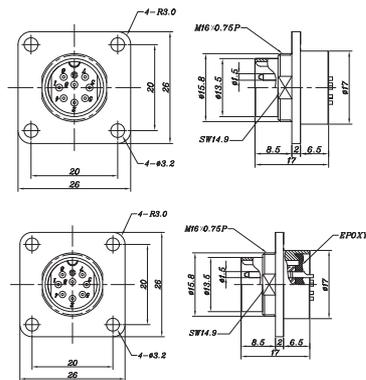
With Silicon

L1 and L2 customizable upon request.

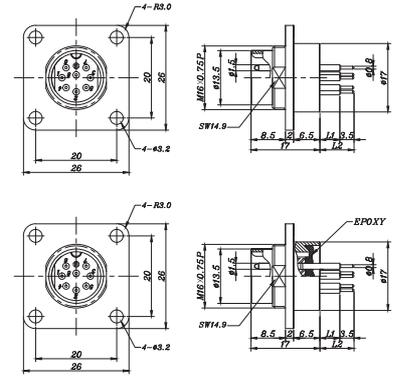
L ₁	L ₂
4,8	8,4



■ SU-20PR Series | Flange, Potting



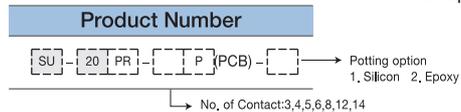
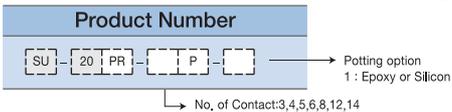
With Epoxy



With Epoxy

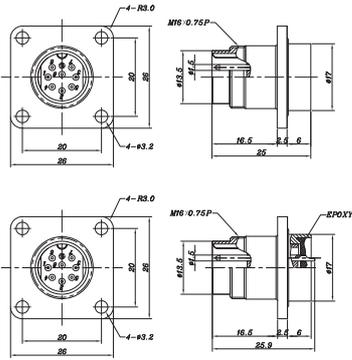
L1 and L2 customizable upon request.

L ₁	L ₂
4,8	8,4

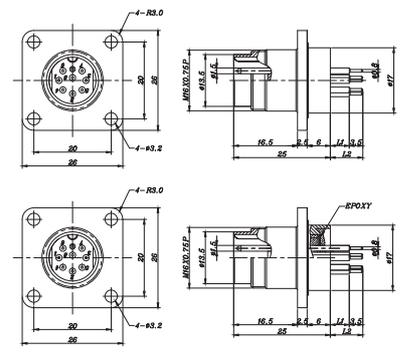
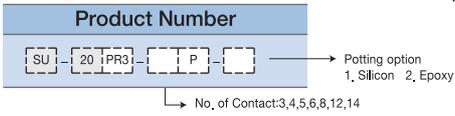


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SU-20PR3 Series | Flange, Potting



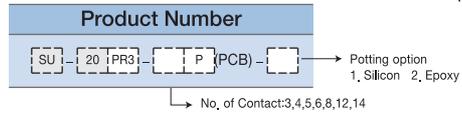
With Epoxy



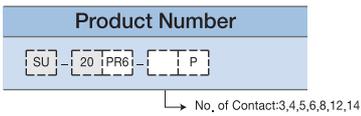
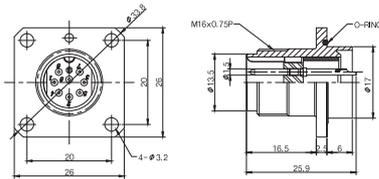
L1 and L2 customizable upon request.

L ₁	L ₂
4,8	8,4

With Epoxy



■ SU-20PR6 Series



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

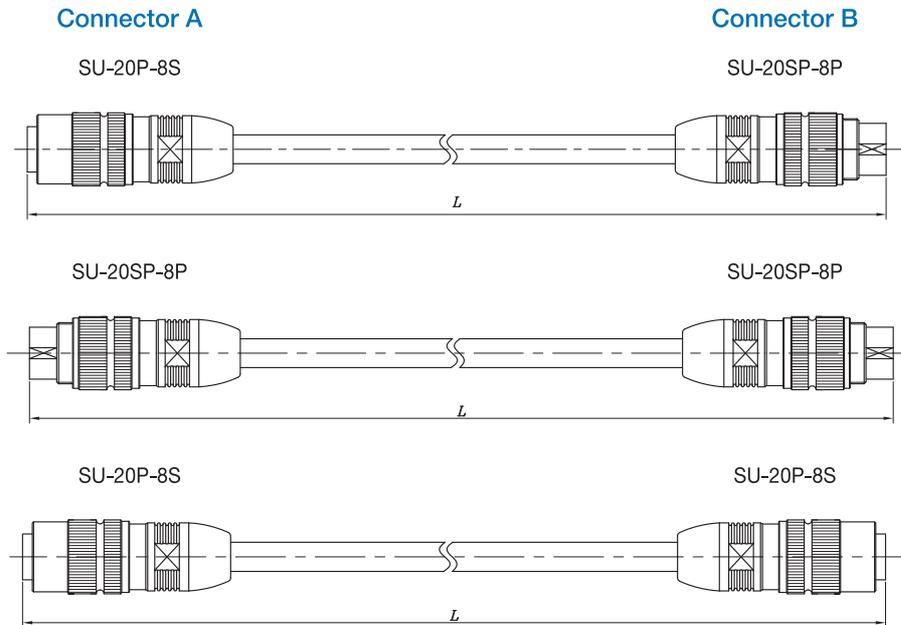
Applications

- 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.



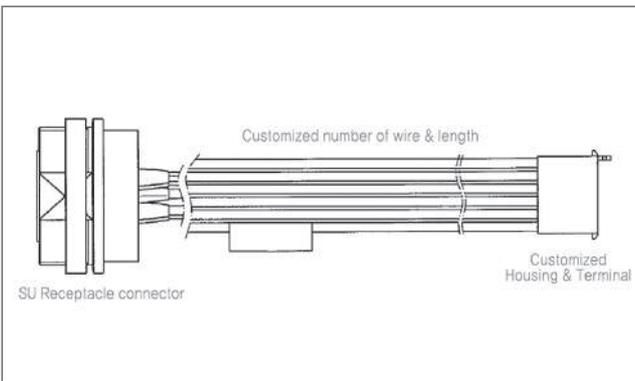
Features

- 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

SU Series Accessories

Protecting Caps for SU series

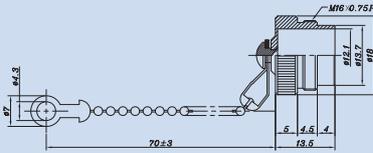


SU Female Contact type Receptacle



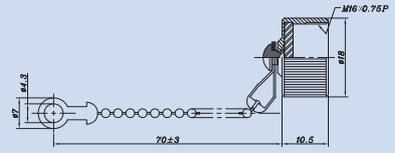
SU Male Contact type Receptacle

SU-20SBRC, SU-20SBRC1



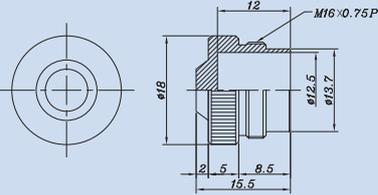
- SU-20SBRC : 70mm
- SU-20SBRC1 : Long chain type (120mm)

SU-20BRC, SU-20BRC1

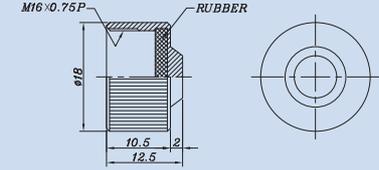


- SU-20BRC : 70mm
- SU-20BRC1 : Long chain type (120mm)

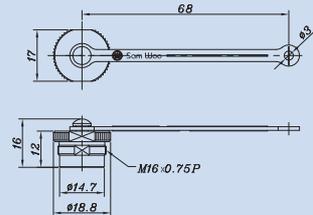
SU-20SBRC2



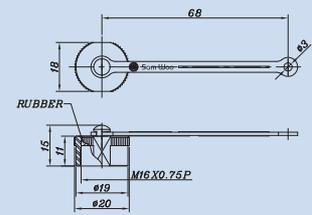
SU-20BRC2



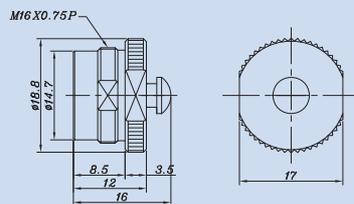
SU-20SBRC4



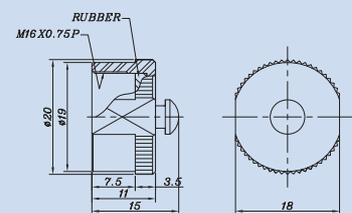
SU-20BRC4



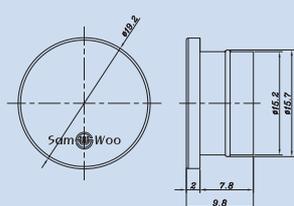
SU-20SBRC5



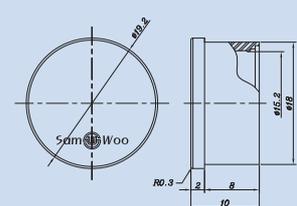
SU-20BRC5



SU-20SBR-DUST CAP

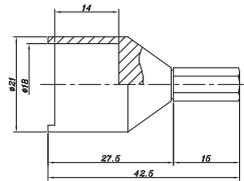
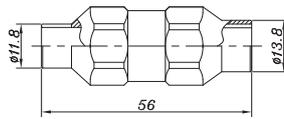
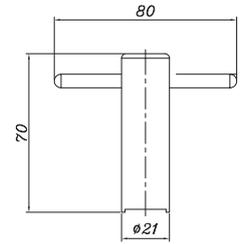
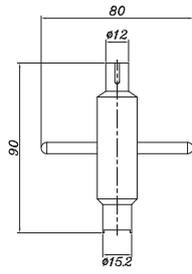


SU-20BR-DUST CAP

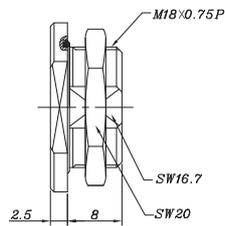
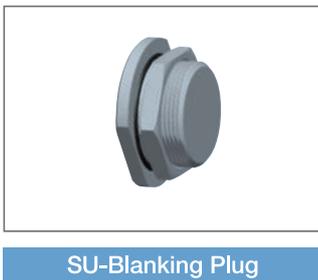


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

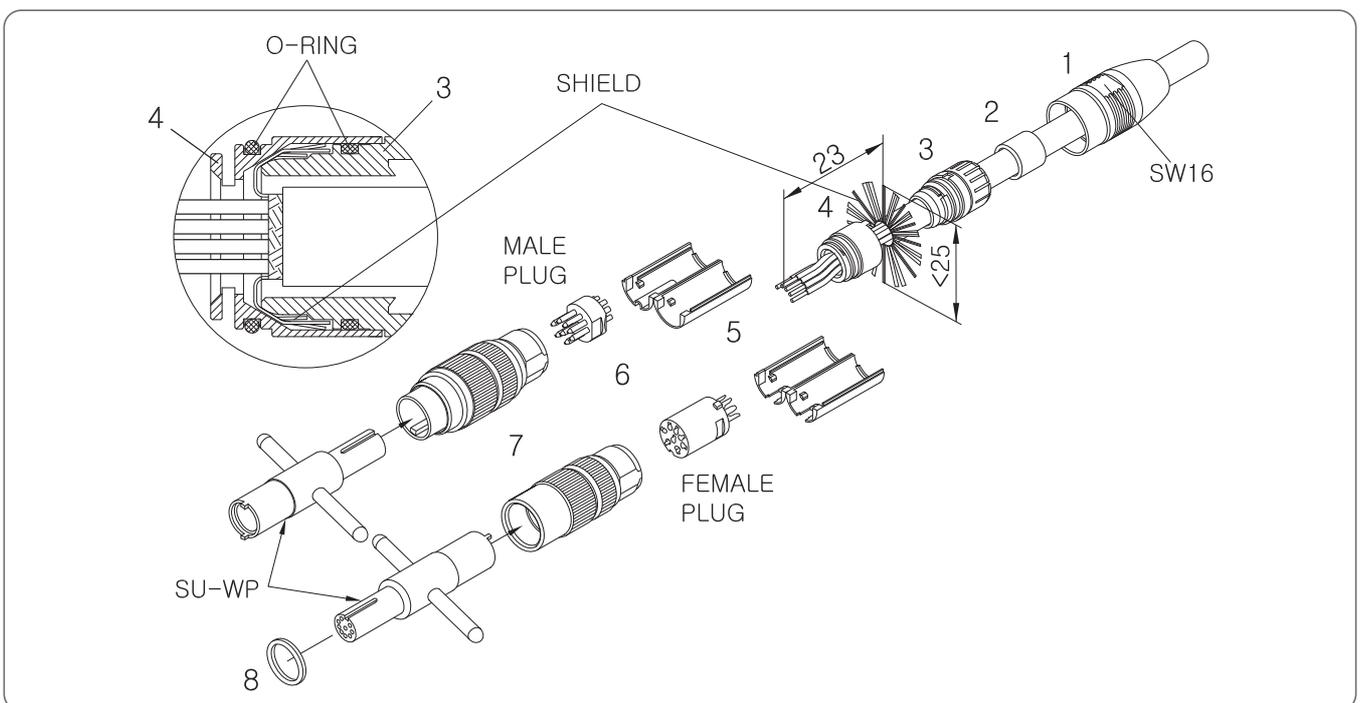
■ Tool for SU series



■ Below should go under Accessories



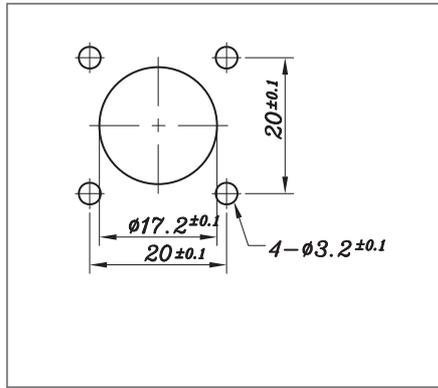
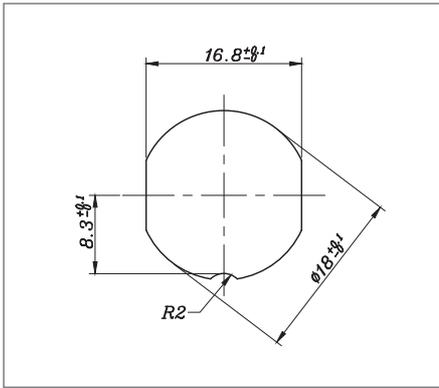
■ SU Cable Assembly Instruction



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

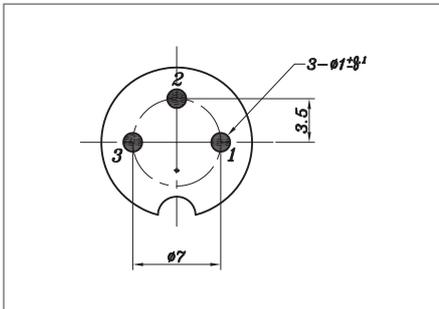
SU Series

Panel Layout

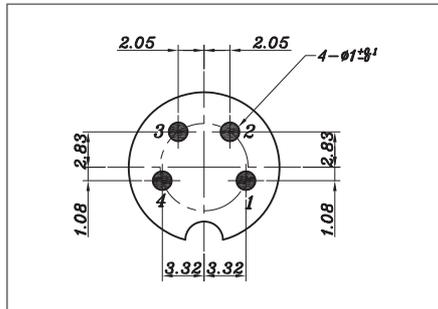


PCB Layout

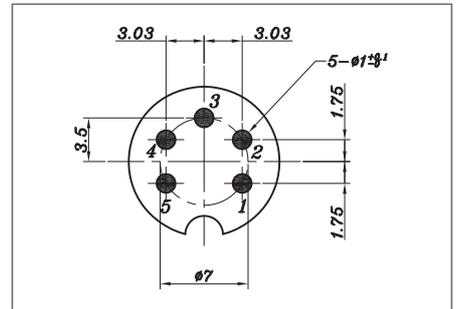
20 Size - 3 Core



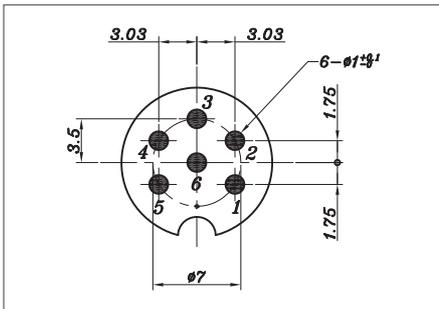
20 Size - 4 Core



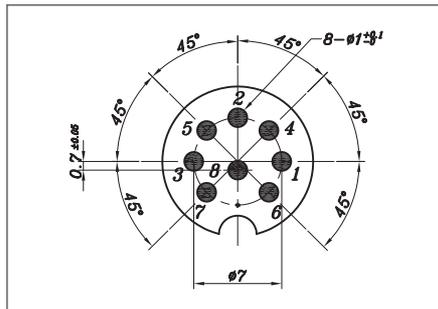
20 Size - 5 Core



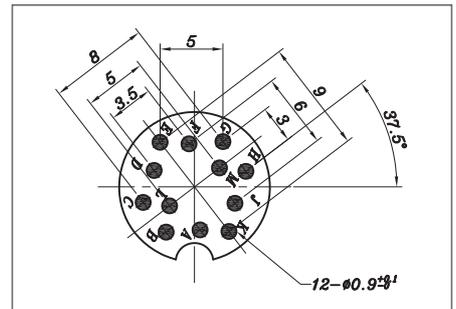
20 Size - 6 Core



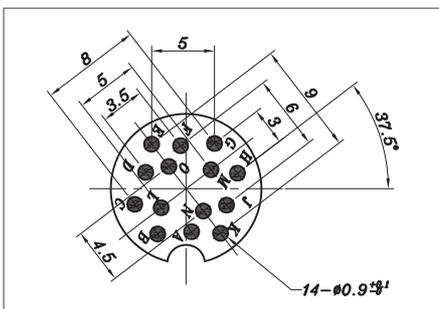
20 Size - 8 Core



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

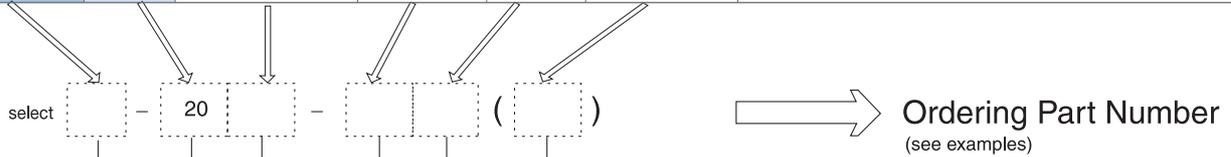
- AISG 1,1/2,0 Protocol Standard
- Protection rating of IP67
- IEC 61076-2-106 and AISG Specification
- RoHS Compliant   • UL Recognized
- Cost Effective
- Safe Connection / Easy Mounting

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

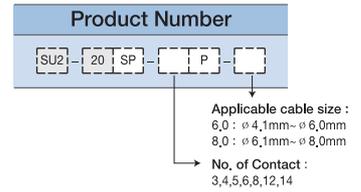
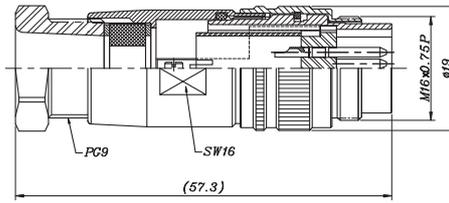
Size / No. of Contacts Performance	Standard	Size 20							
		3	4	5	6	8	A5	12	14
Contact Arrangement									
	IEC 61076-2-106	○	○	○	○	○		○	○
	IEC 60130-9	○	○		○	○			
Rated Voltage	IEC 60664-1	300V		300V		100V		150V	
	IEC 61076-2-106	100V		63V		32V		32V	
	UL 1977	60V							
Rated Current(40℃)	IEC 60512-5-2	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 ~ ∅ 9							
Temperature Range		- 40℃ ~ +85℃							
IP Protection Rating		IP67 / IP68							

■ Material Used / Finish

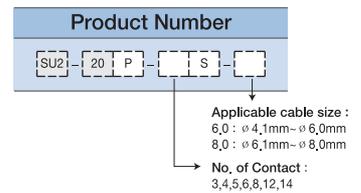
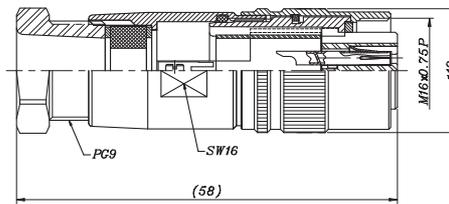
		Material	Finish
Body		Zinc Alloy, Brass	Ni Plating
Insulator		PA	Black
Contacts	Male	Brass	Gold Plating
	Female	Phosphor Bronze	Gold Plating

SU2 / SU3 Series Plug(Male/ Female Contact)

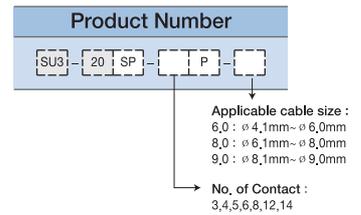
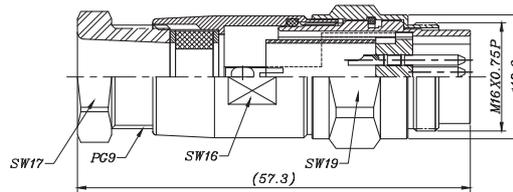
■ SU2-20SP Series



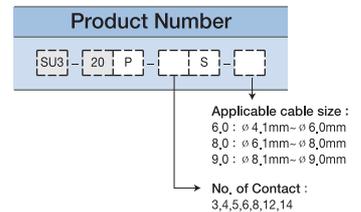
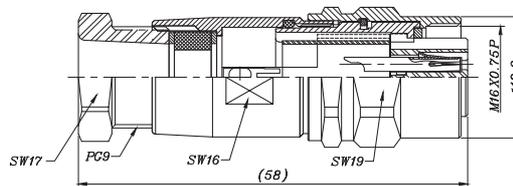
■ SU2-20P Series



■ 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

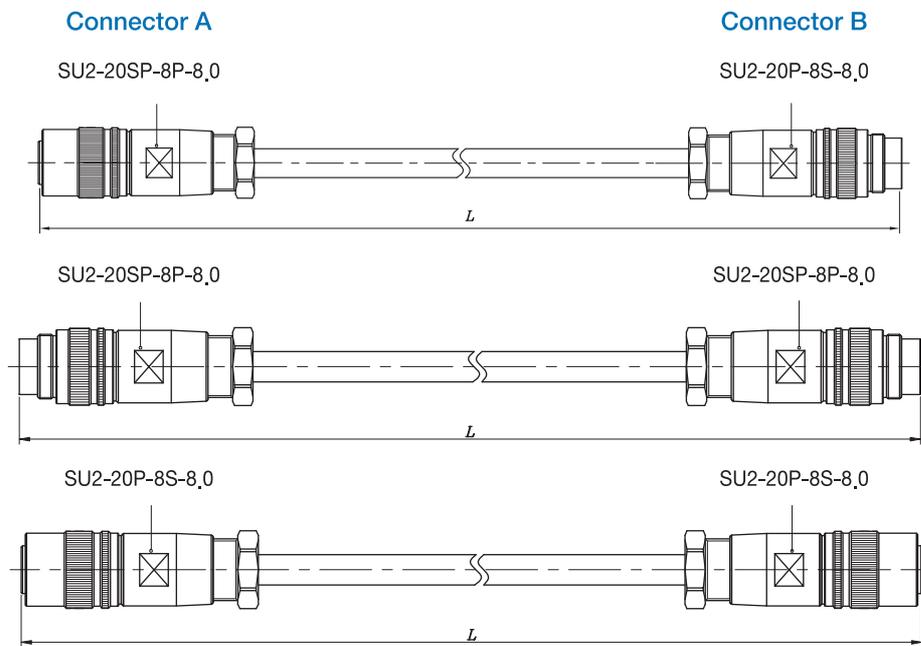
Applications

- 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 - ***

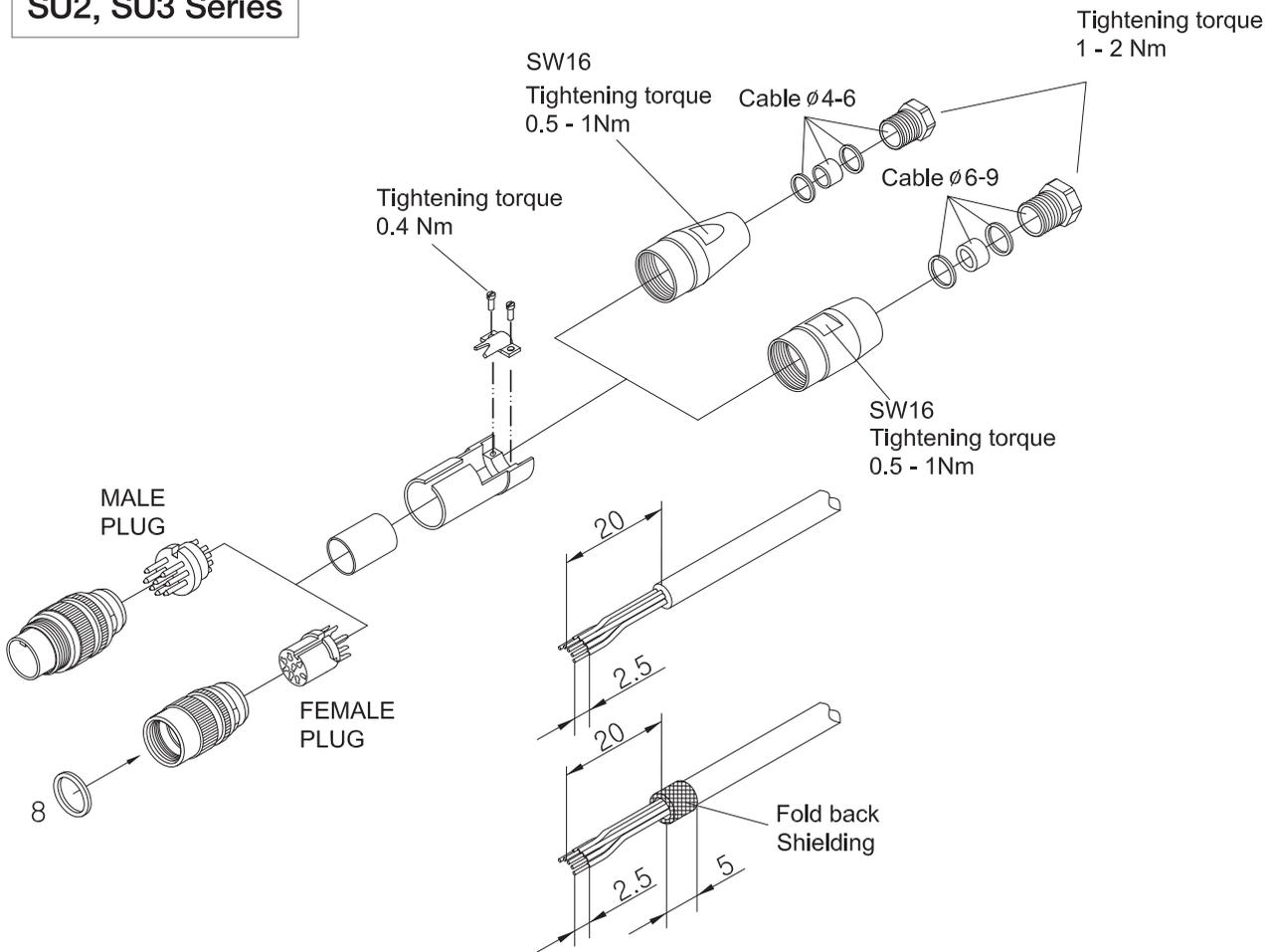
* The last three digits of product number indicates cable length, Cable length can be customized,



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

■ SU2, SU3 Cable Assembly Instruction

SU2, SU3 Series





SW Series Part Numbering



Features

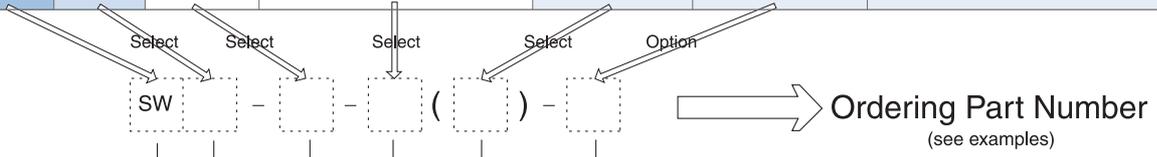
- Excellent performance at low cost
- Screw mounting assures solid connection
- Manufactured with precision

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	6	9	10	12
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

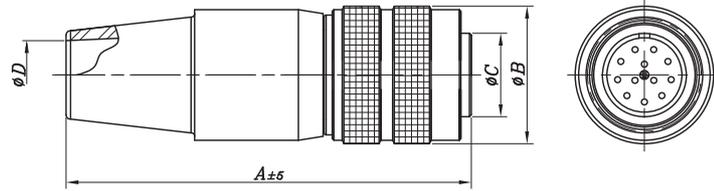
SW Series Mini-map



SW Series

SW Male Plug, Female Receptacle / Adapter

SW Plug



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

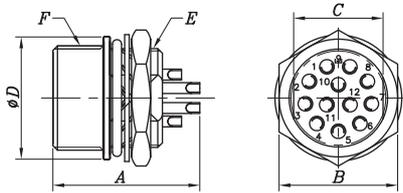
Product Number	A	∅ B	∅ C	∅ D
SW-10- 2 (P)	42	14	8,5	7
SW-10- 3 (P)				
SW-10- 4 (P)				
SW-10- 9 (P)				
SW-10-10 (P)				
SW-10-12 (P)				

→ SW Series
→ Size
→ No. of Contacts

Silver contact

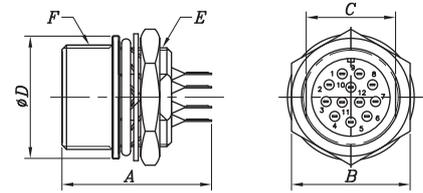
Include '-S' at end of Product Number.
EX) SW-8-4 (P)-S
SW-10-12 (P)-S

SW Solder Type Receptacle



Product Number	A	B	C	∅ 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

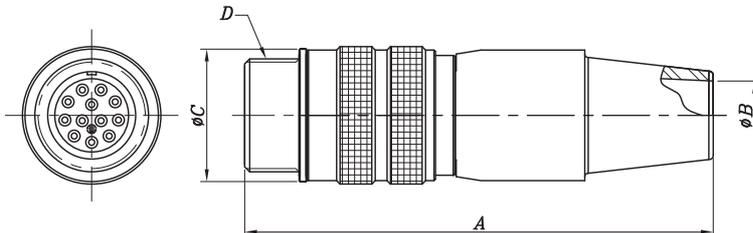


Product Number	A	B	C	∅ D	E	F
SW- 8- 4 (RPCB)	15,7	10	7,5	10	M8×0,5P	M9×0,5P
SW- 8- 5 (RPCB)						
SW- 8- 6 (RPCB)						
SW-10- 9 (RPCB)	15,7	13	9,8	13,5	M11×0,75P	M11,5×0,5P
SW-10-10 (RPCB)						
SW-10-12 (RPCB)						

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	∅ B	∅ C	D	Product Number	A	∅ B	∅ 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								

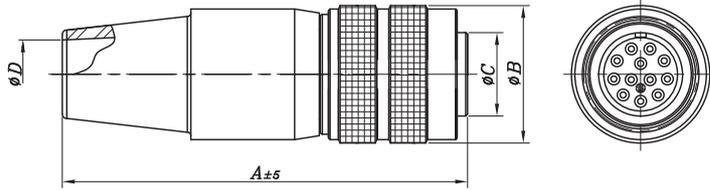
→ SWA Series
→ Size
→ No. of Contacts

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)

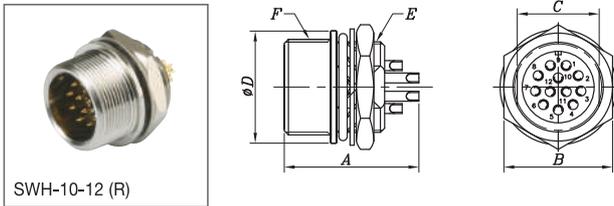
Silver Plating Contact
 Include '-S' at end of Product Number,
 EX) SWH-8-4 (P)-S
 SWH-10-12 (P)-S

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)				

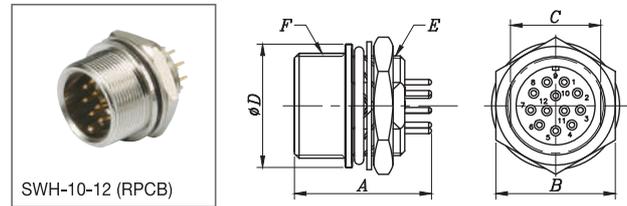
■ SWH Solder Type Receptacle



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)

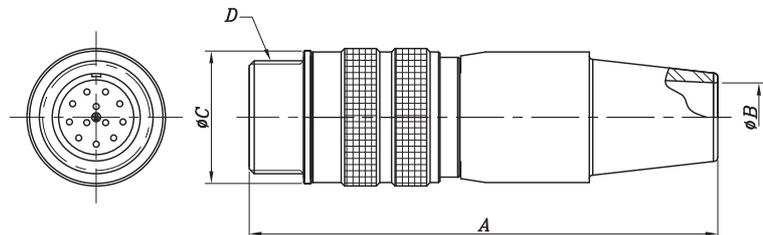
Product Number	A	B	C	ø D	E	F
SWH- 8- 4 (RPCB)	15	10	7,5	10	M8×0,5P	M9×0,5P
SWH- 8- 5 (RPCB)						
SWH- 8- 6 (RPCB)						
SWH-10- 9(RPCB)	15	13	9,8	13,5	M11×0,75P	M11,5×0,5P
SWH-10-10(RPCB)						
SWH-10-12(RPCB)						

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

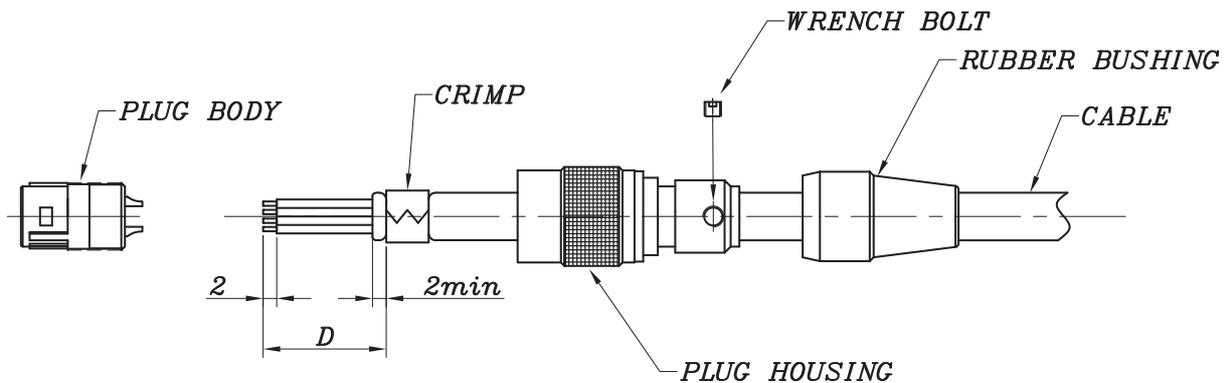


Table 1

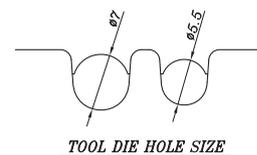
unit : mm

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.



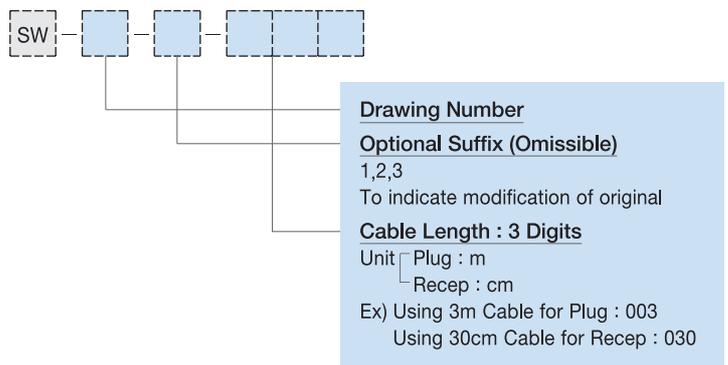
Features

- 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



■ 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

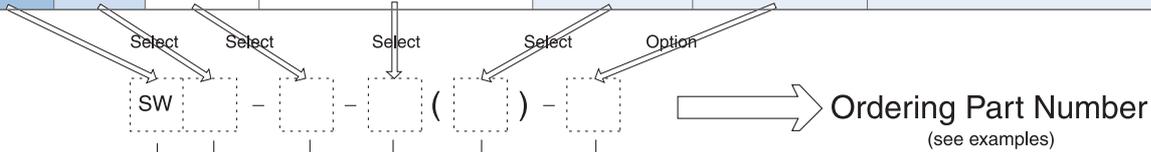
- Excellent performance at low cost
- Screw mounting assures solid connection
- Rubber gasket assures water resistance
- Manufactured with precision
- Protection rating of IP67 with over molding

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	•	SWA Series (Adapter for SW series)
	HA				•	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					
Contact Resistance (Maximum) ³	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

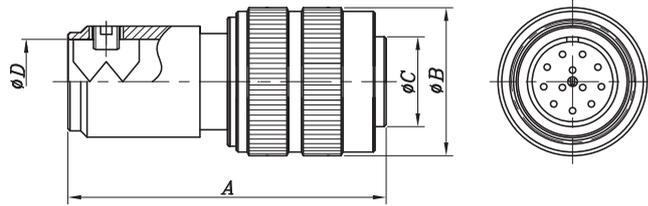
■ SW Series Mini-map



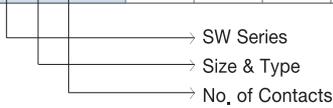
SW IP67 Series

Male Plug, Female Receptacle/Adapter

SW Plug



Product Number	A	∅ B	∅ C	∅ D
SW-8W-4 (P)	24,5	12	6,7	6,0
SW-8W-5 (P)				
SW-8W-6 (P)				

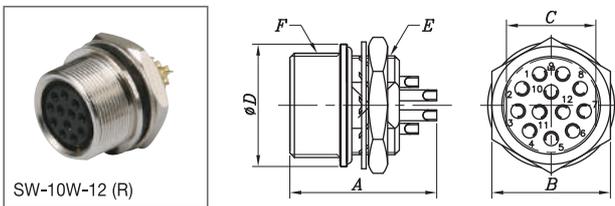


Product Number	A	∅ B	∅ C	∅ D
SW-10W- 2 (P)	30	15	9,5	7
SW-10W- 3 (P)				
SW-10W- 4 (P)				
SW-10W- 9 (P)				
SW-10W-10 (P)				
SW-10W-12 (P)				

Silver Plating Contact

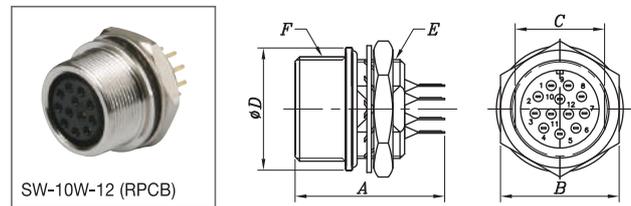
Include '-S' at end of Product Number,
EX) SW-8W-4 (P)-S
SW-10W-12 (P)-S

SW Solder Type Receptacle



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)						
SW-10W-12 (R)						

SW PCB Type Receptacle

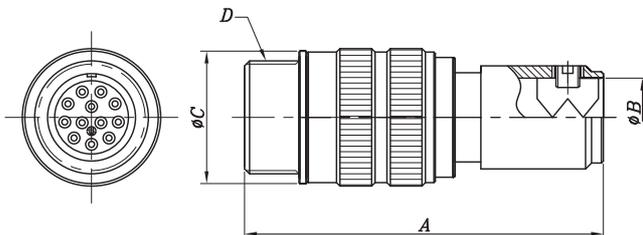


Product Number	A	B	C	∅ D	E	F
SW- 8W-4 (RPCB)	15,7	10	7,5	11	M8×0,5P	M10×0,5P
SW- 8W-5 (RPCB)						
SW- 8W-6 (RPCB)						
SW-10W-9(RPCB)	16,4	13	9,8	14,5	M11×0,75P	M12,5×0,5P
SW-10W-10(RPCB)						
SW-10W-12(RPCB)						

Silver Plating Contact

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

SWA Adapter



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								

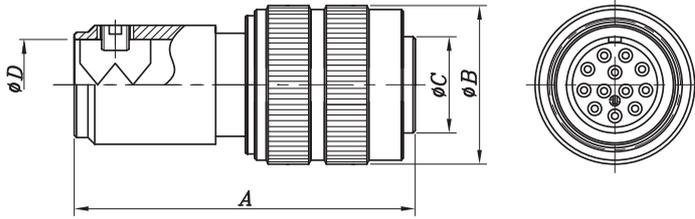


Silver Plating Contact

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)

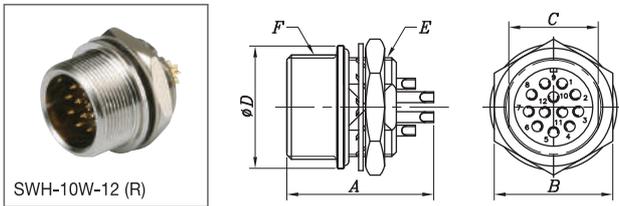
Product Number	A	ø B	ø C	ø D	Product Number	A	ø B	ø C	ø D
SWH-8W-4 (P)	24,5	12	6,7	6,0	SWH-10W- 2 (P)	30	15	9,5	7
SWH-8W-5 (P)					SWH-10W- 3 (P)				
SWH-8W-6 (P)					SWH-10W- 4 (P)				
	SWH-10W- 9 (P)								
	SWH-10W-10 (P)								
	SWH-10W-12 (P)								

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

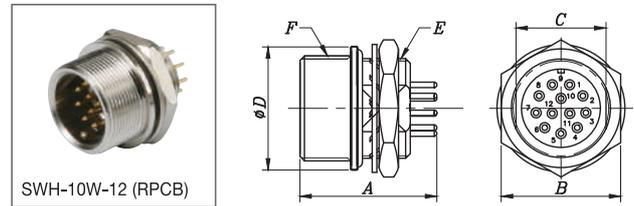
■ SWH Solder Type Receptacle



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)						

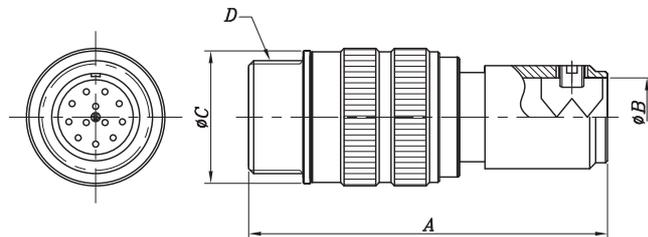
Silver Plating Contact

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

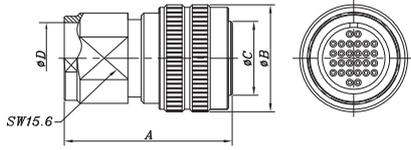
Include '-S' at end of Product Number,
EX) SWHA-8W-4-S
SWHA-10W-12-S

SWHA Series
Size & Type
No. of Contacts

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

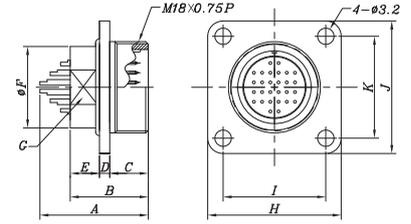
SW IP67 Series Female Plug, Male Receptacle

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

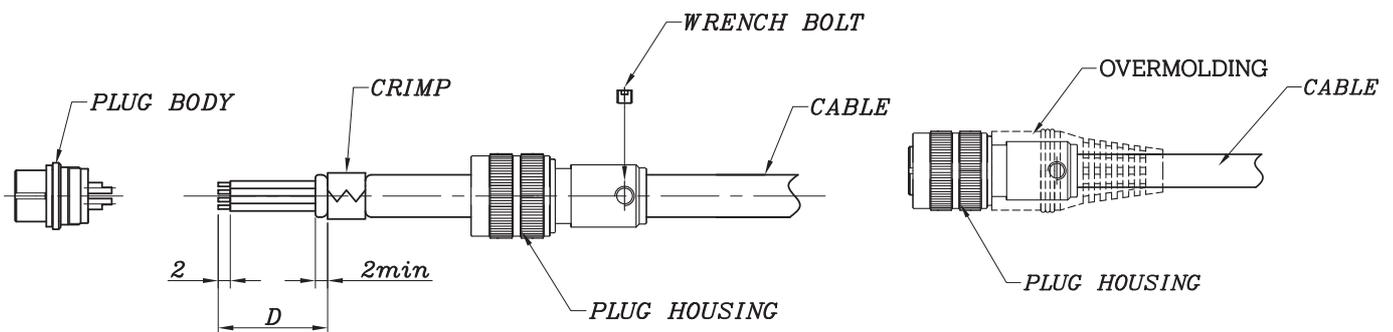


Table 1

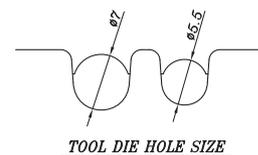
Size	Spanner Jaw	D (Dimension)	Tightening Force	Notes
SW - 8	8	10	1,5N · m (15kgf · cm)	SA-HCT size ϕ 5,5
SW - 10	10	16	2,0N · m (20kgf · cm)	SA-HCT size ϕ 7,0

unit : mm

SA-HCT (Hand Crimp Tool)



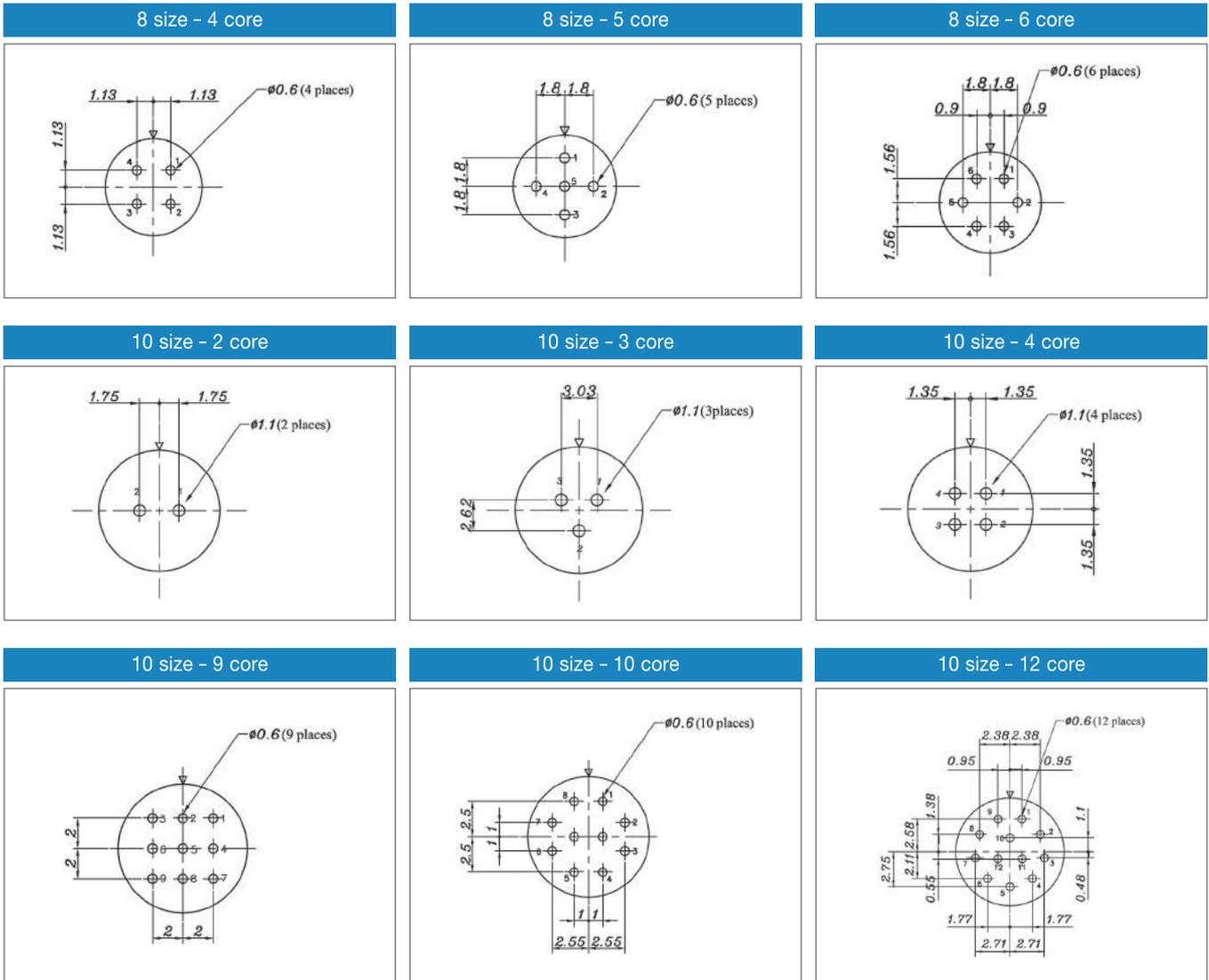
Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.



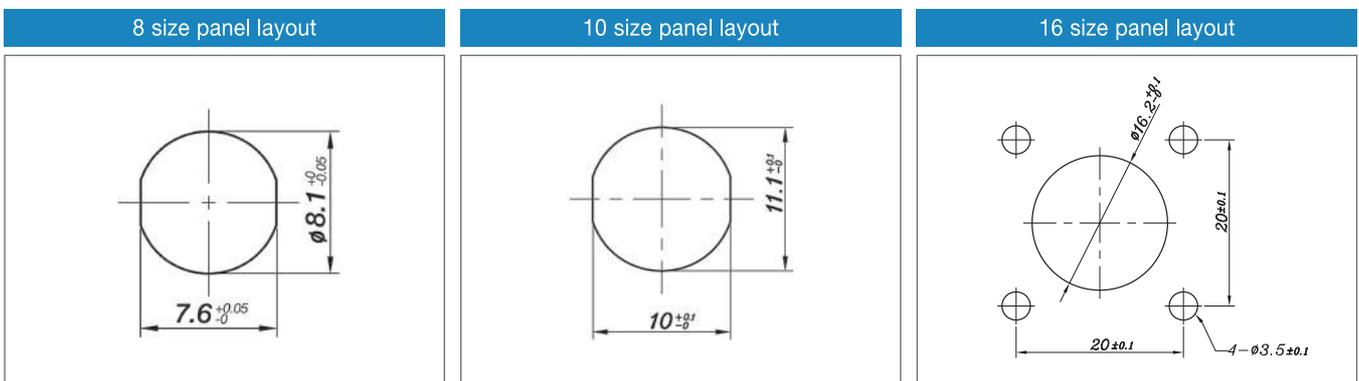
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SW IP67 Series Mounting Hole Layout

SW Receptacle PCB Hole Layout



SW Receptacle Panel Layout



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



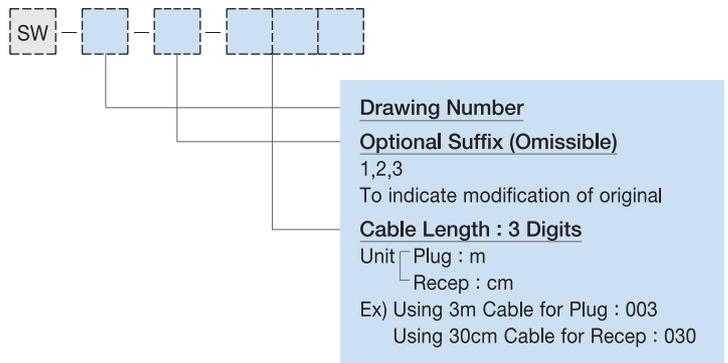
Features

- 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

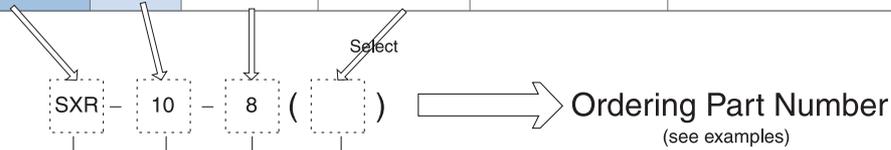
- Miniature
- Ultra Light Weight
- Ground Function

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

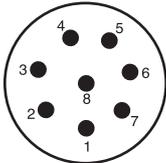
SXR - 10 - 8 (R)
 SXR series - Size 10 Receptacle - 8 Female Contact

Material Used / Finish

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

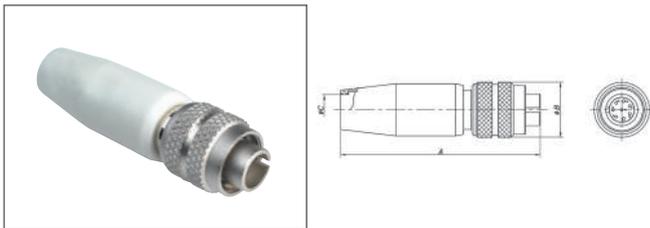
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

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 \times 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
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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



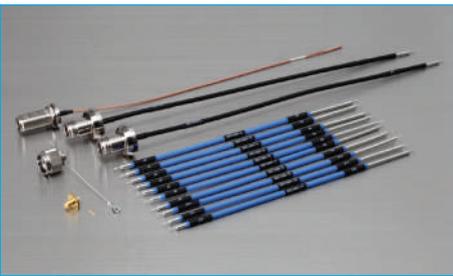
Features

- 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

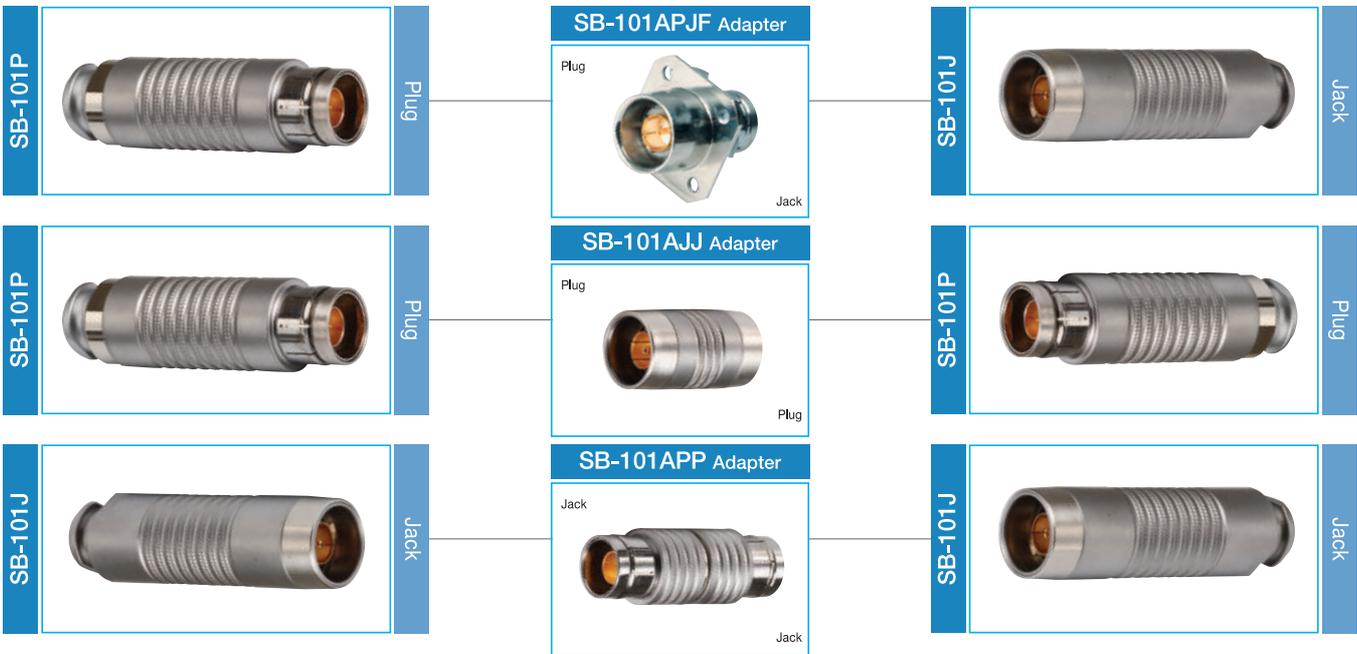
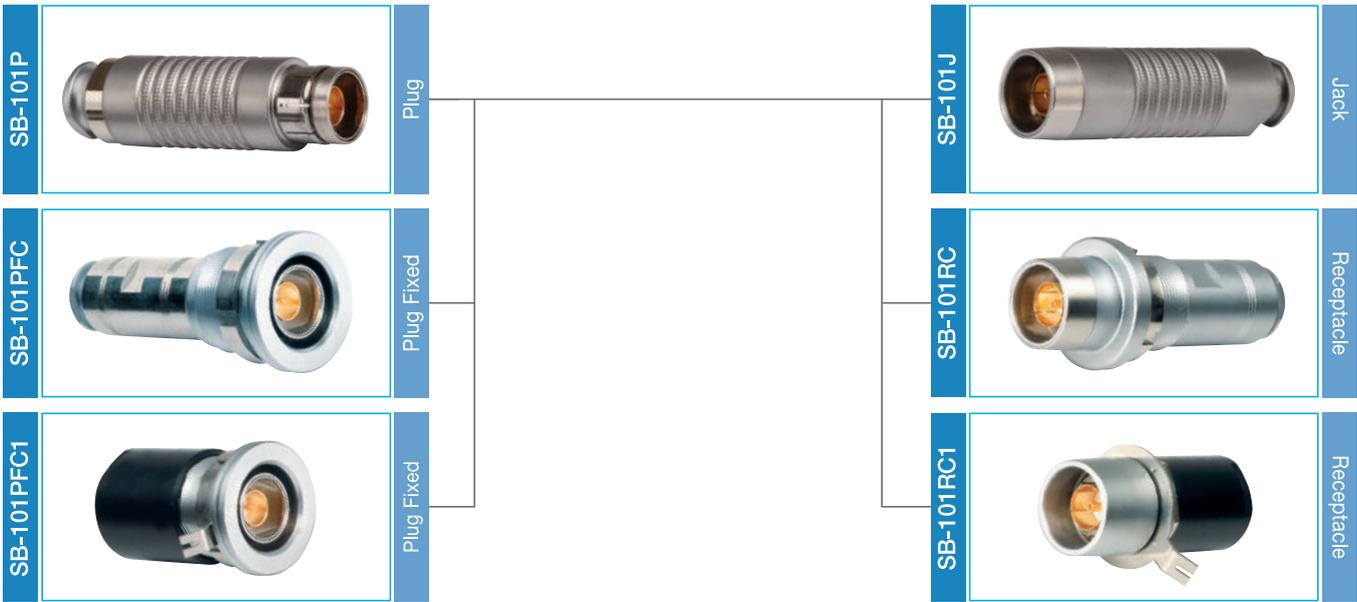
Accessory Code

- 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)

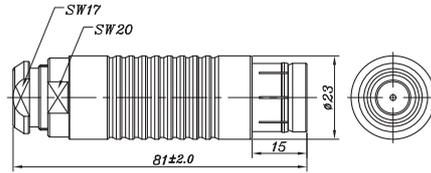


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SB Series Triaxial

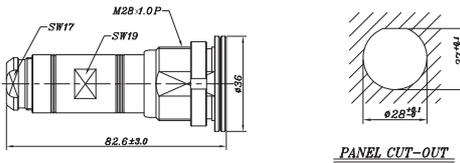
SB-101 Model (European Standard)

Includes accessories,
Accessories available separately.



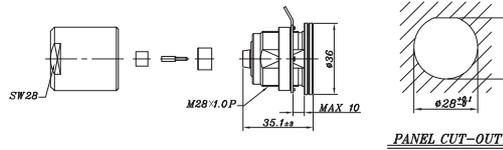
Product Number

- 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



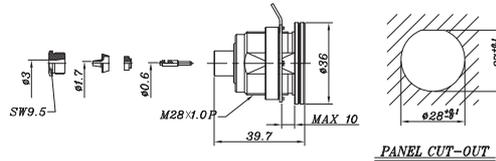
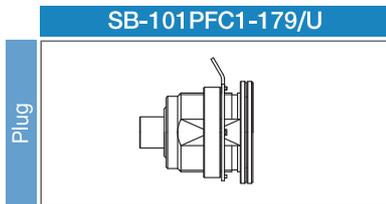
Product Number

- 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

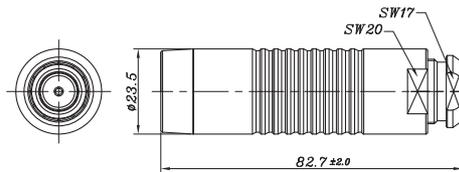


Product Number

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

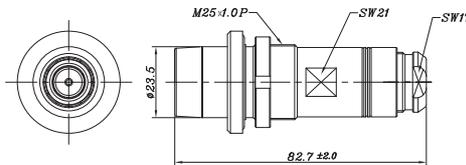
Product Number

- 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



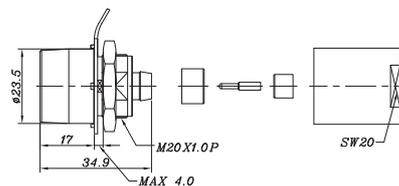
Product Number

- 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



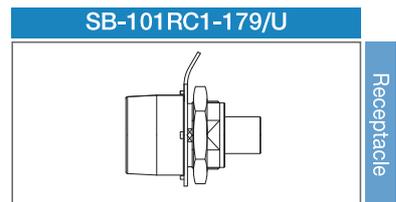
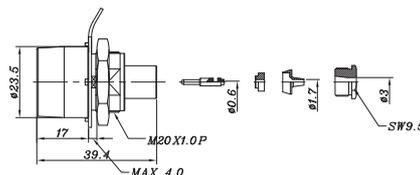
Product Number

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



Product Number

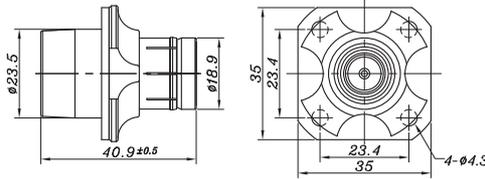
- SB-101RC1-179/U
- Receptacle for cable assembly



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

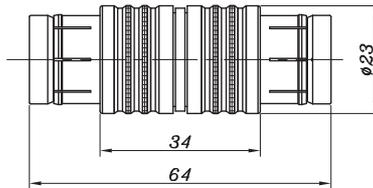
■ SB-101 Model (European Standard)

Adapter



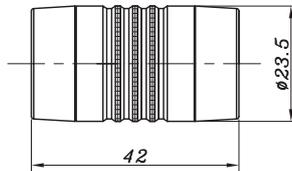
Product Number

SB-101APJF
Adapter : Jack



Product Number

SB-101APP
Adapter : Jack + Jack

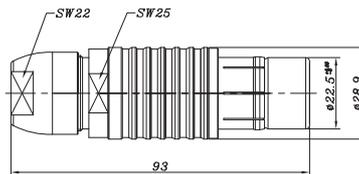


Product Number

SB-101AJJ
Adapter : Plug + Plug

■ SB-102 Model (American Standard)

Includes accessories,
Accessories available separately.

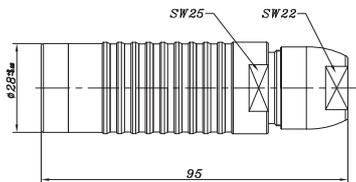


Product Number

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

Product Number

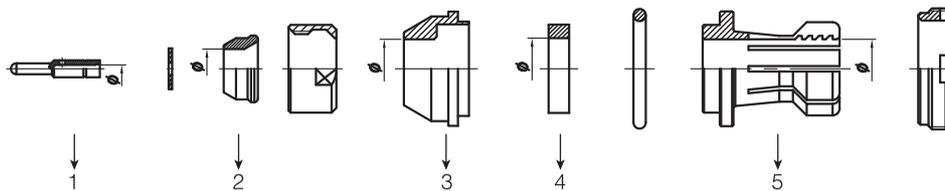
SB-102J-0,8/3,7/9,5



Jack

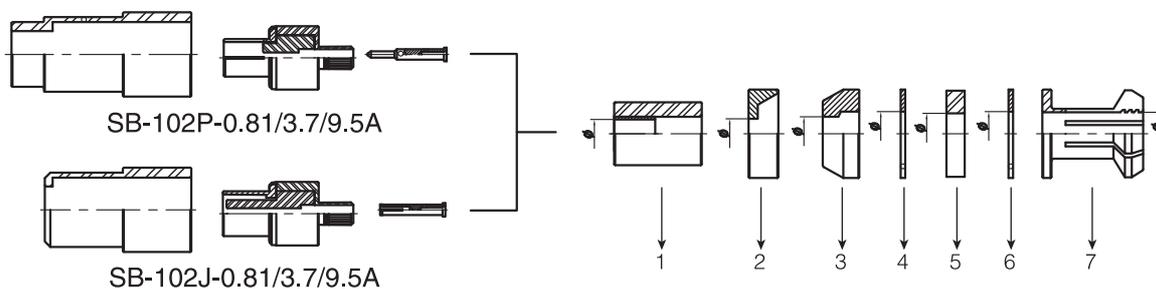
SB Series Accessories(Triaxial)

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

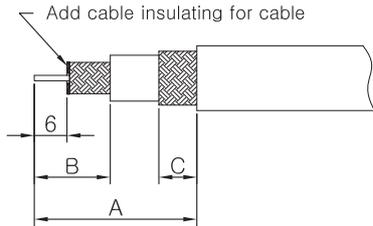
SB-102 Accessory



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							

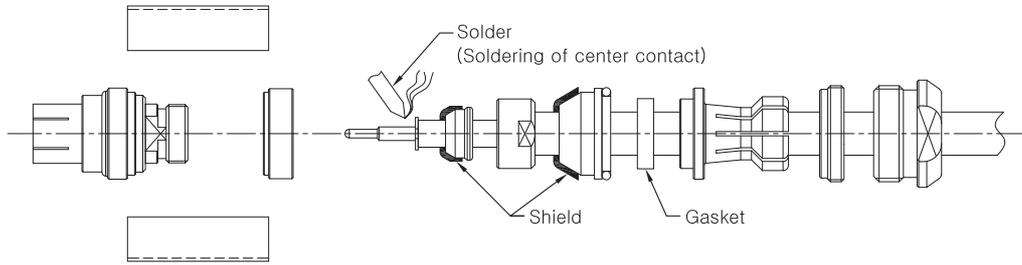
SB-101 Model (European Standard)

SB-101J & SB-101P

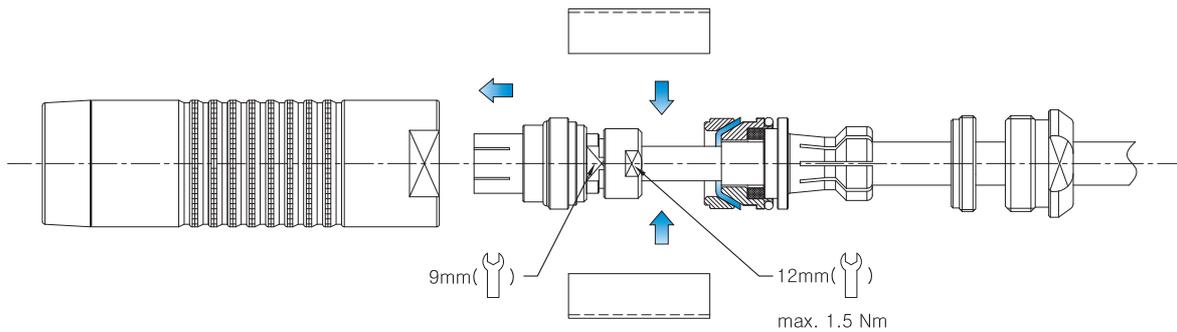


REF.	A	B	C
SB-101P+SB-101J-1,0/4,5	24	14	7
SB-101PFC+SB-101RC-1,0/4,5	25	14	7
SB-101P+SB-101J-1,4/4,5	27	12	7
SB-101PFC+SB-101RC-1,4/4,5	27	12	7
SB-101P+SB-101J-1,4/6,6	27	13	5
SB-101PFC+SB-101RC-1,4/4,6	27	13	5

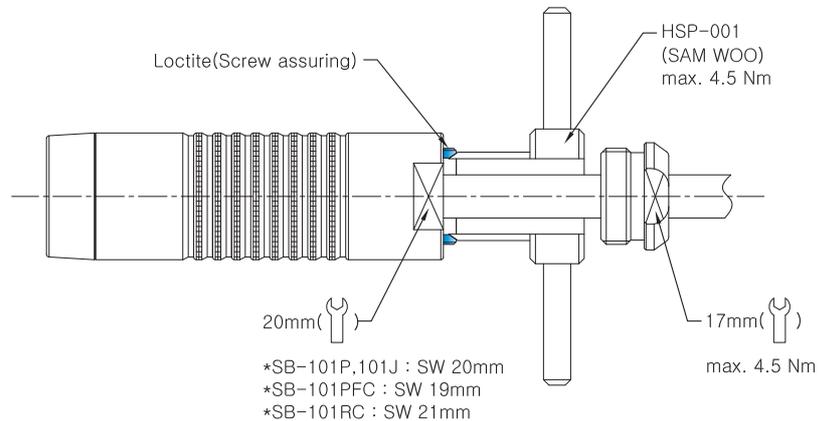
A



B



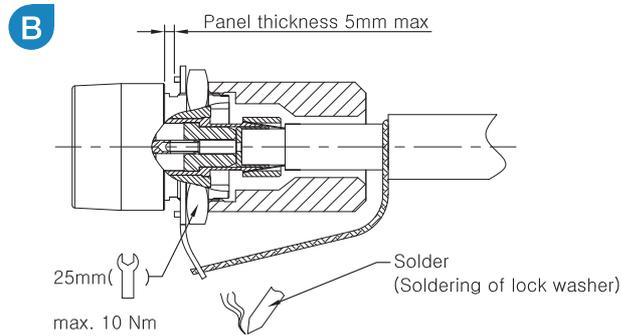
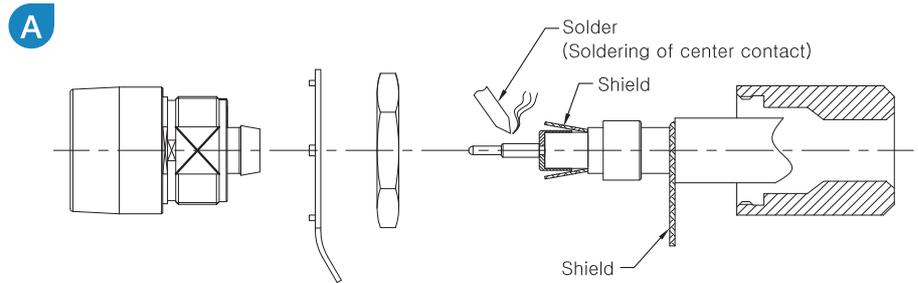
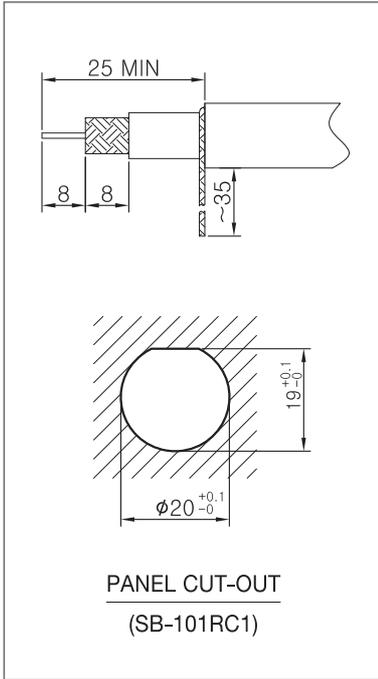
C



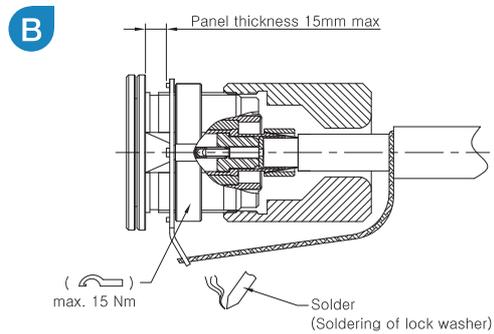
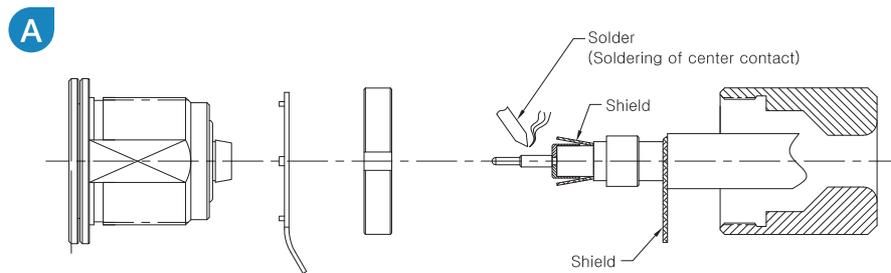
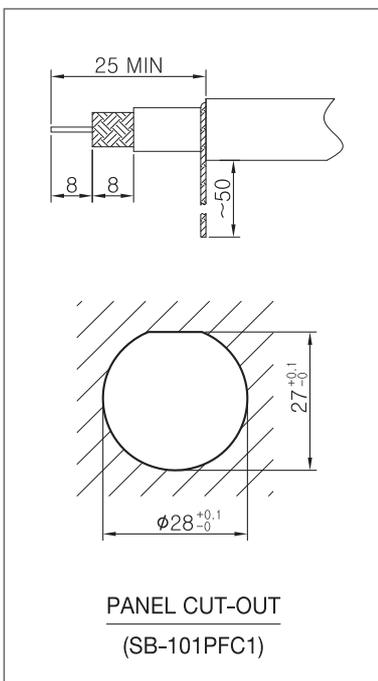
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SB-101 Model (European Standard)

■ SB-101RC1

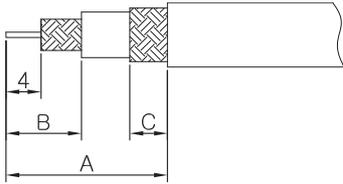


■ SB-101PFC1



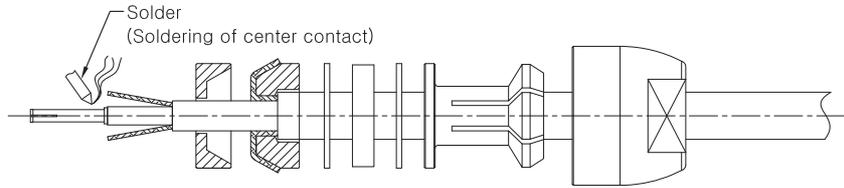
SB-102 Model (American Standard)

■ SB-102P & SB-102J

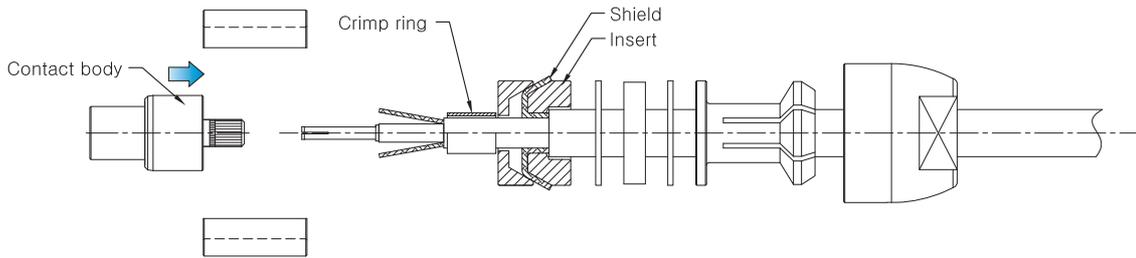


REF.	A	B	C
SB-102P-0,81/3,7/9,5	36	16	13
SB-102J-0,81/3,7/9,5	36	16	13

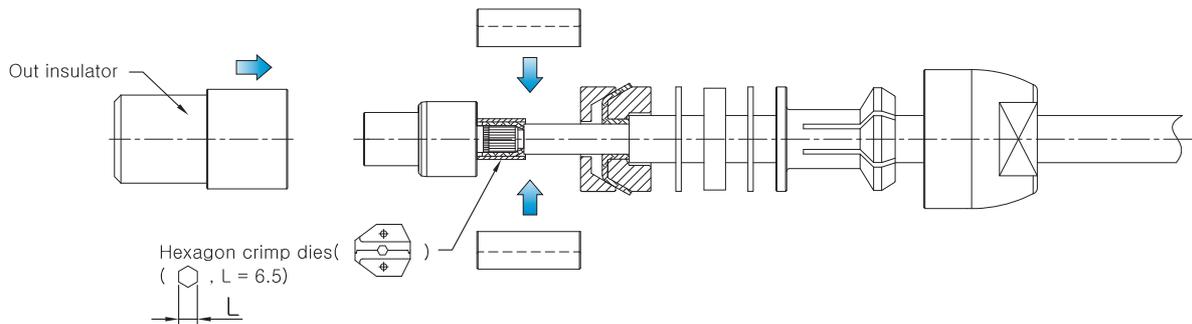
A



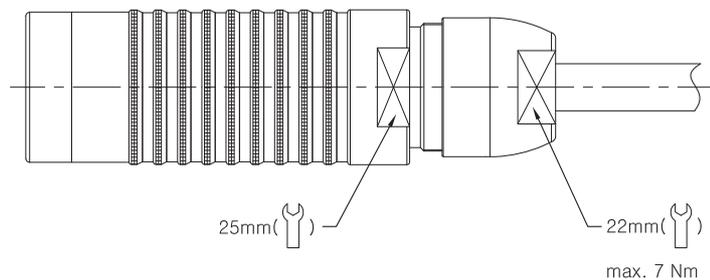
B



C



D



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



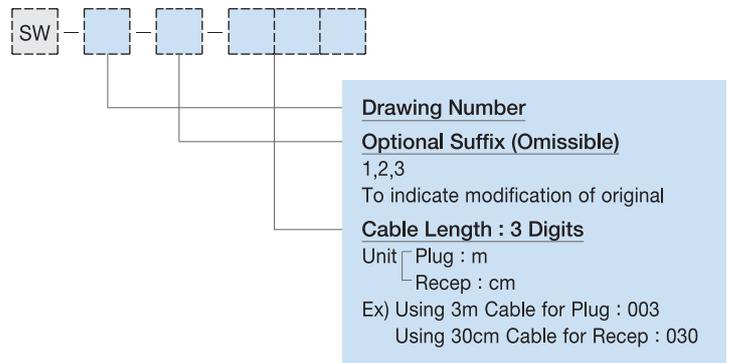
Features

- 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

STEREO PLUG



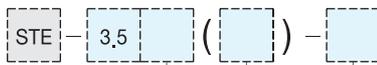
Features

- 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

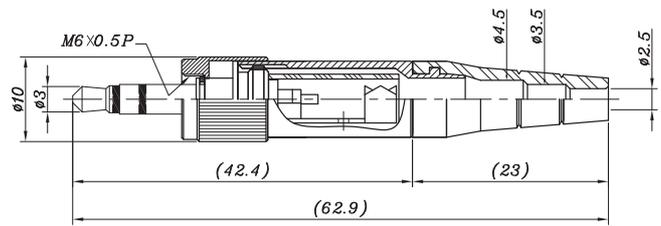
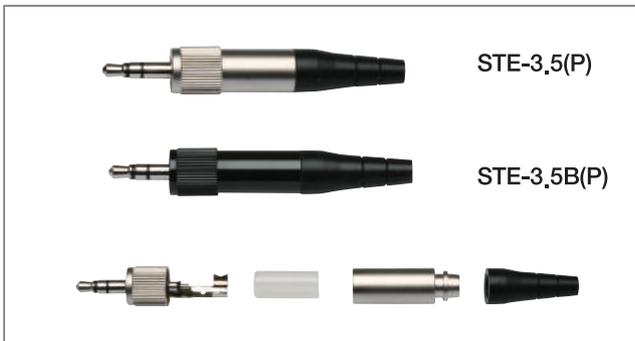
■ Mechanical Performance

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

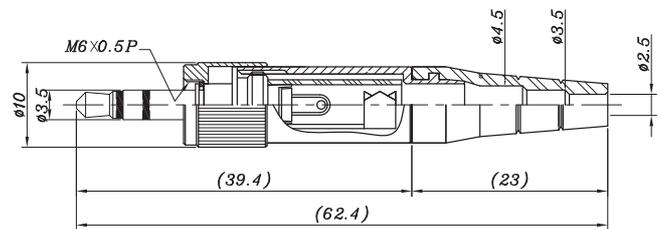
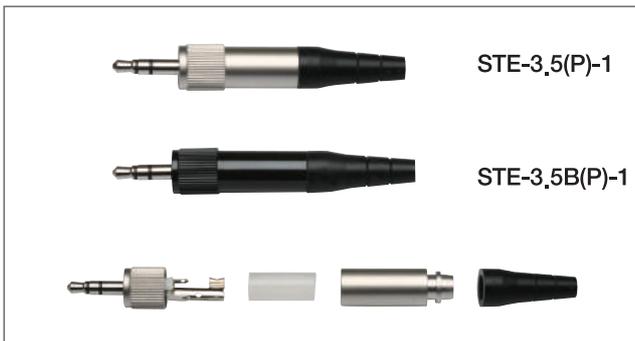
■ STE-3.5(P), STE-3.5B(P)



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

■ STE-3.5(P)-1, STE-3.5B(P)-1

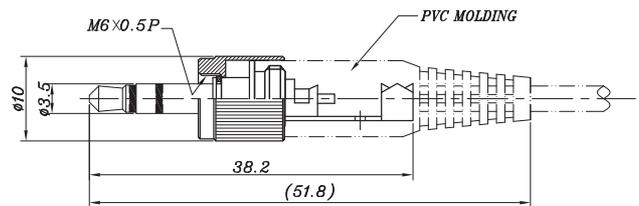
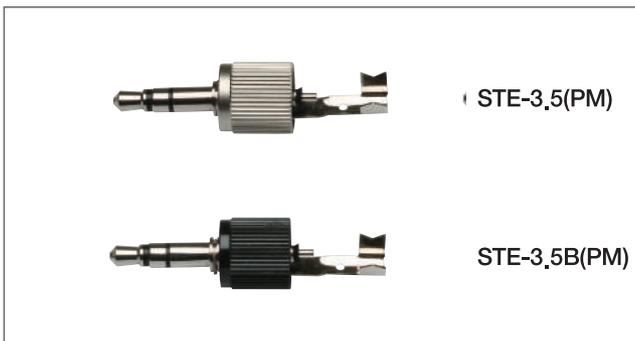
Easy Mechanism for Repair



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

■ STE-3.5(PM), STE-3.5B(PM)

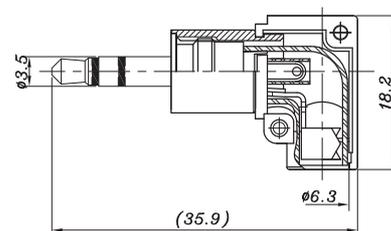
Molding Type



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



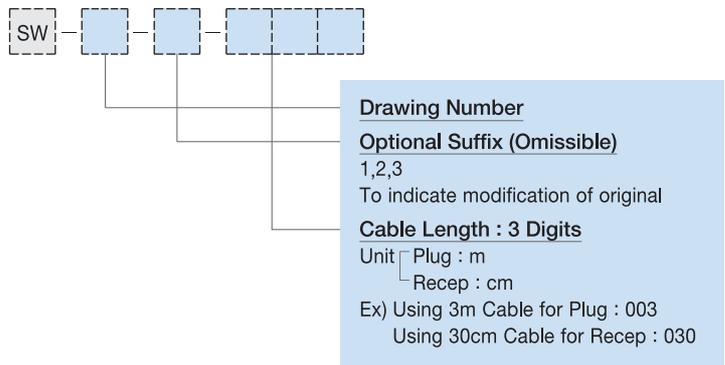
Features

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

Applications

- Audio Signal Transmission
- Stereo Headphones
- Professional Headset Microphones

Part Numbering



STE Cable Assembly with Coil Cable



Type	Construction
A	STE Connector + Coil Cable + Other Connector
B	STE Connector + 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	<1,15+0,02f(GHz)	
	Flexible	750V				

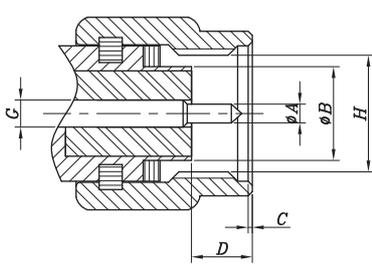
SMB	Impedance	50 Ω		Insulation resistance	1000M Ω min	
	Frequency range	DC to 4GHz		Insertion loss	0,6dB max	
	Contact current	DC 1,5A max		V,S,W,R	Straight	1,3+0,04f
	Voltage rating	250V R,M,S				
	Contact resistance	Center Contacts	0,3m Ω		Right-angle	1,4+0,06f
Outer Contacts		0,5m Ω				

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	1,3 max
Right-angle					1,35 max	

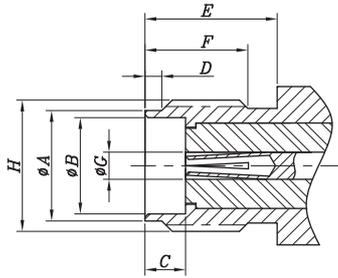
Material Used / Finish

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

■ SMA Interface Dimensions



Plug



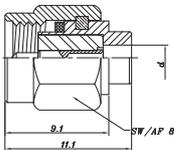
Jack

Interface Dimension

SMA	Plug		Jack	
	mm		mm	
	min.	max.	min.	max.
∅ A	0.9	0.94	5.28	5.49
∅ 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	
∅ 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

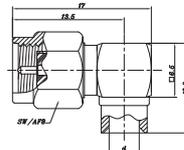


Product Number

SMA-P-402/U

SMA-P-405/U

Right-angle - Semi-rigid Cable - Direct Solder

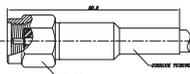


Product Number

SMA-LP-402/U

SMA-LP-405/U

Flexible Cable - Crimp



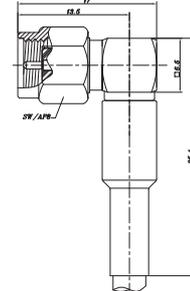
Product Number

SMA-PC-58/U

SMA-PC-178/U

SMA-PC-316/U

Right-angle - Semi-rigid Cable - Crimp



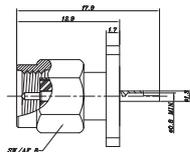
Product Number

SMA-LP-58/U

SMA-LP-178/U

SMA-LP-316/U

Fixed Plug - Flange - Solder Pot Terminated

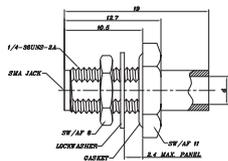


Product Number

SMA-PR

■ SMA Jacks

Bulkhead - Semi-rigid Cable - Direct Solder

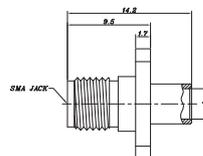


Product Number

SMA-BJR-402/U

SMA-BJR-405/U

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

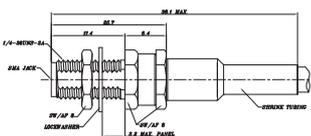


Product Number

SMA-JR-402/U

SMA-JR-405/U

Bulkhead - Flexible Cable - Crimp



Product Number

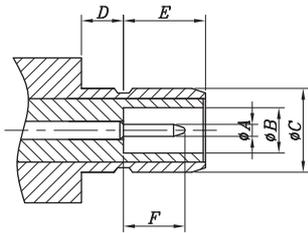
SMA-BJC-58/U

SMA-BJC-178/U

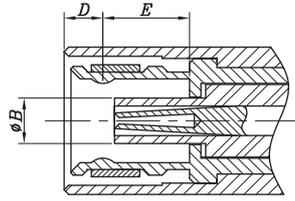
SMA-BJC-316/U

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

■ SMB Interface Dimensions



Plug



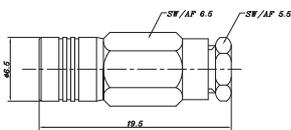
Jack

Interface Dimension

SMB	Plug		Jack	
	min.	max.	min.	max.
∅ A	0,48	0,53		
∅ B	2,08			2,06
∅ C	3,66	3,71		
D	1,65			1,63
E	3,33	3,58	3,58	
F		2,97	2,97	

■ SMB Jack

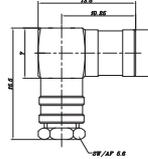
Flexible Cable - Clamp



Product Number

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

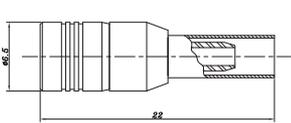
Right-angle - Flexible - Clamp



Product Number

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

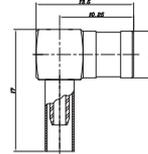
Flexible Cable - Crimp



Product Number

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

Right-angle - Flexible Cable - Crimp

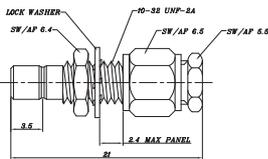


Product Number

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

■ SMB Plug

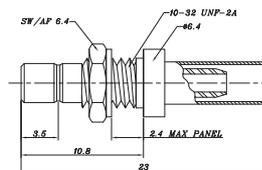
Bulkhead - Flexible - Clamp



Product Number

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

Bulkhead - Flexible Cable - Crimp

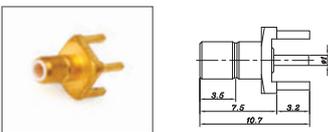


Product Number

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

■ SMB Receptacles

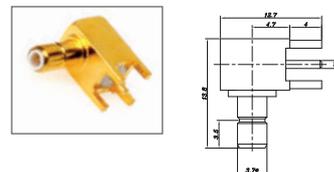
PCB Receptacle - 4 leg - Stub Terminated



Product Number

- SMB-J4R-PCB

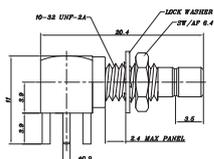
Right-angle - PCB Receptacle - 4 leg - Stub Terminated



Product Number

- SMB-LJ4R-PCB

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



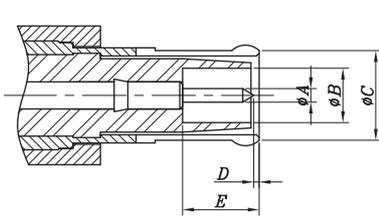
Product Number

- SMB-LB4R-PCB

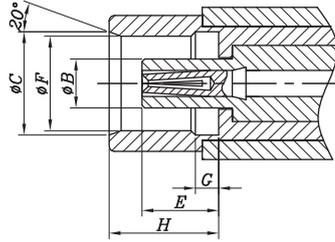
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

MCX Series Miniature

MCX Interface Dimensions



Plug



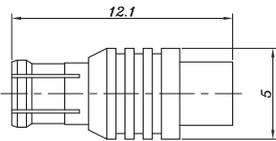
Jack

Interface Dimension

MCX	Plug		Jack	
	mm		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

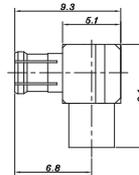
Semi-rigid - Direct Solder



Product Number

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

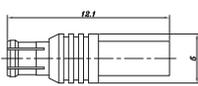
Right-angle - Semi-rigid - Direct Solder



Product Number

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

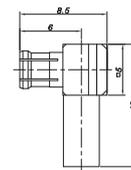
Flexible Cable - Crimp



Product Number

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

Right-angle - Flexible Cable - Crimp

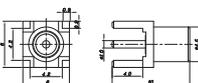


Product Number

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

MCX Terminator

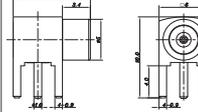
PCB Receptacle - 4 leg - Stub Terminated



Product Number

MCX-J4R-PCB

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



Product Number

MCX-LJ4R-PCB

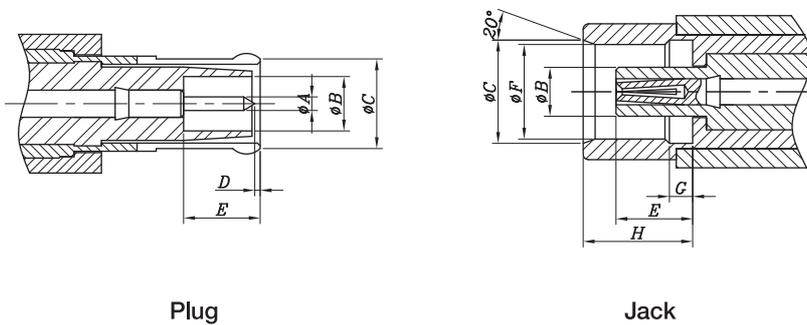




MMCX Features

- 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

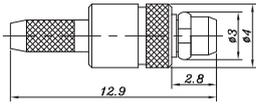
MMCX	Impedance	50 Ω	Contact resistance	Center contacts	5m Ω
	Frequency range	up to 2GHz		Outer contacts	2,5m Ω
	Contact current	DC 1A max.	Insulation resistance	1000M Ω	
	Working voltage	170V, 50Hz	V.S.W.R	Straight	1,2Max
				Right-angle	1,3max

Material Used / Finish

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

■ **MMCX Plugs**

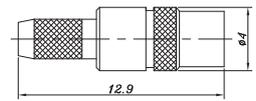
Flexible Cable - Crimp



Product Number

MMCX-PC-178/U

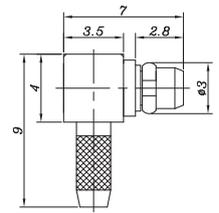
MMCX-PC-316/U



Product Number

MMCX-JC-316/U

Right - angle - Flexible Cable - Crimp



Product Number

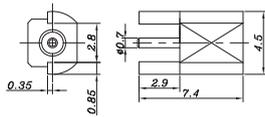
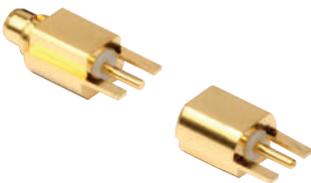
MMCX-LPC-178/U

MMCX-LPC-316/U

■ **MMCX Terminator**

PCB Receptacle - 2leg - Stub Terminated

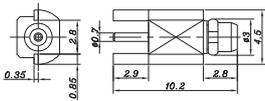
MMCX-P2R-PCB



Product Number

MMCX-J2R-PCB

MMCX-J2R-PCB

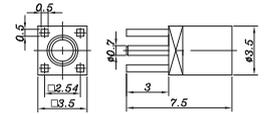


Product Number

MMCX-P2R-PCB

PCB Receptacle - 4leg - Stub Terminated

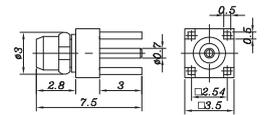
MMCX-J4R-PCB



Product Number

MMCX-J4R-PCB

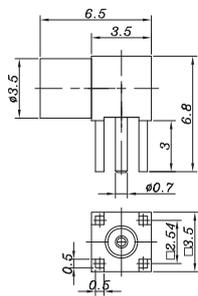
MMCZX-P4R-PCB



Product Number

MMCX-P4R-PCB

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



Product Number

MMCX-LJ4R-PCB

BNCCHD High Frequency / Part Numbering



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				

BNCCHD Mounting Hole Layout / Jack / Adapter

■ 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	6CHF B
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.

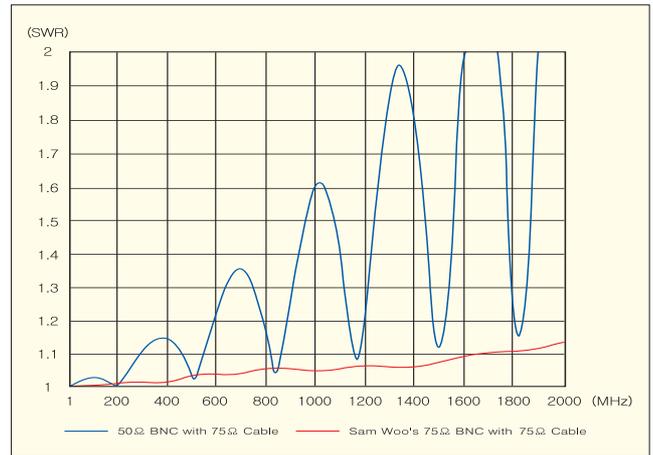
■ Major Performance

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?

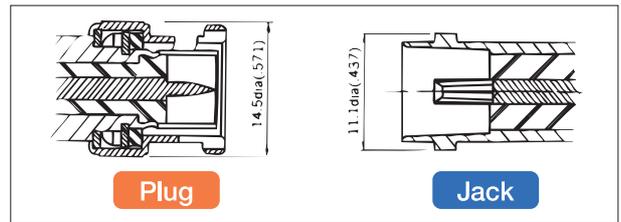
The 50 Ω BNC connector that terminates to the 75 Ω video coax is not sufficient in producing maximum performance for today's high analog and digital transmission, causing a mismatch that results in signal degradation and reduction in picture quality. The data on the right shows that the 75 Ω connectors 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

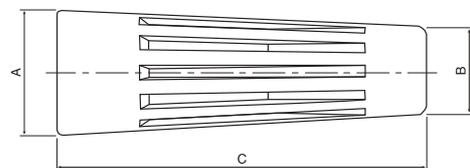
■ Interface Dimension



■ 1GHz and 3GHz Compared



■ Boot Dimension / Part Numbering(for boot only)

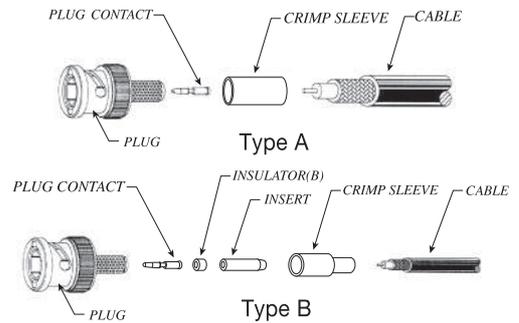
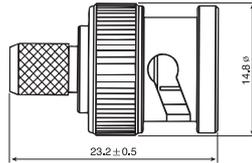


Model	Cable	∅ A	∅ B	C
BNC-color 01	RG-179/U, 1,5C 2V	12,5	5,5	28
BNC-color 02	2,5C 2V, 3C 2V	12,5	6	32
BNC-color 03	1505A, RG-59/U	12,5	8,5	36

- ↓
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.

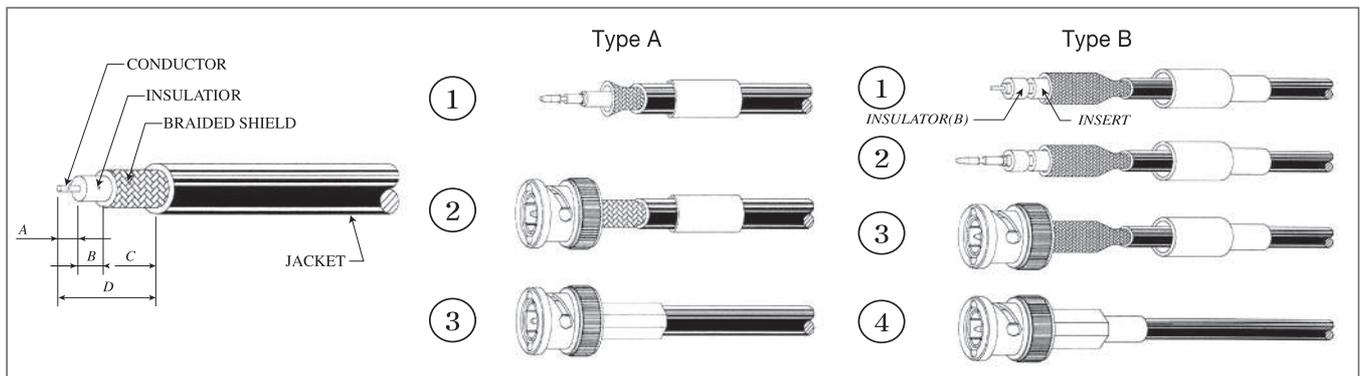
■ **BNC Plugs**



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)

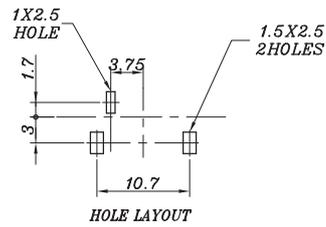
Tool	Color of Handles	Tool Die	Hexagon		Square		Hexagon		Square		Hexagon	
			A	B	C	D	E	F				
SW-HT	Red	HTD-02		5,87		1,36		6,48		1,59		5,41
TC-1	Blue	TCD-5CFB	A		B		C	8,05	D	1,2	E	
		TCD-7CA						10,23		1,93		

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		●		●		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		●		●		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.

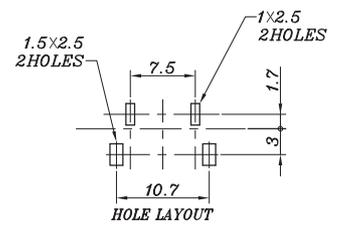
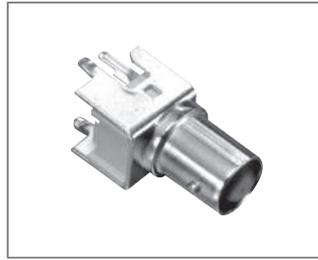
■ **BNC Receptacles**

SW-2497B-PCB



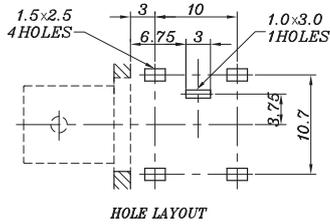
Vertical w/o Switch

SW-2520B-PCB



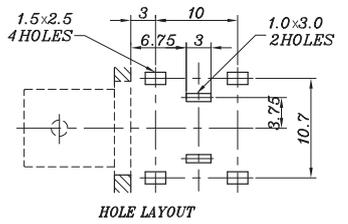
Vertical with Switch

SW-2639B-LPCB



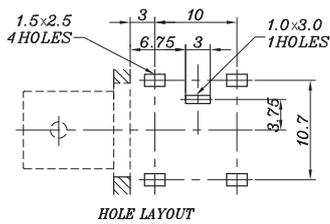
Horizontal w/o Switch

SW-2521B-LPCB



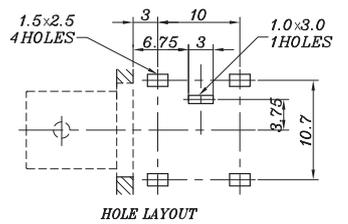
Horizontal with Switch

SW-2635B-LPCB



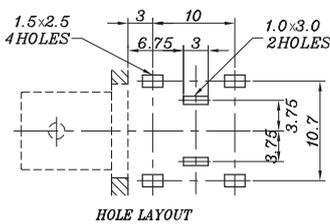
Horizontal w/o Switch (Short)

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.

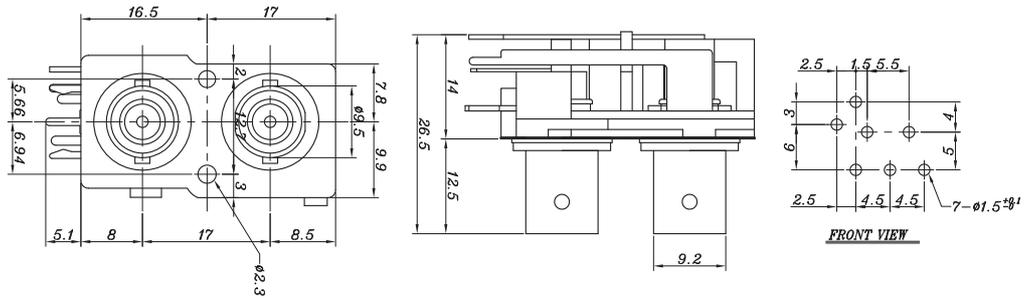
■ BNC Receptacles

With Switches

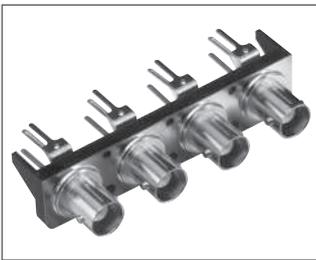
BNC2-P/B



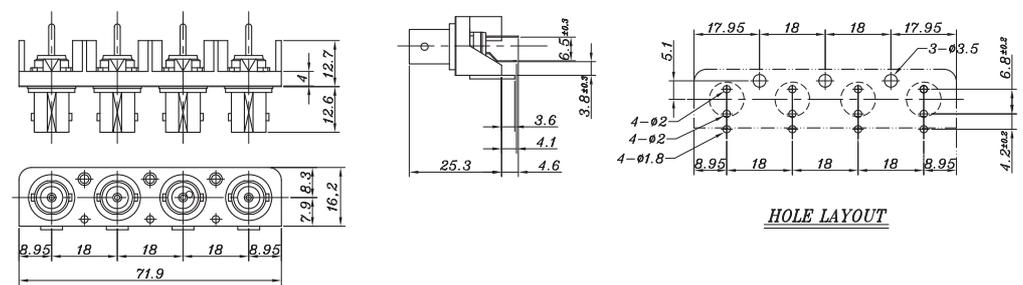
Vertical with 2 Switches



BNC4-P/B



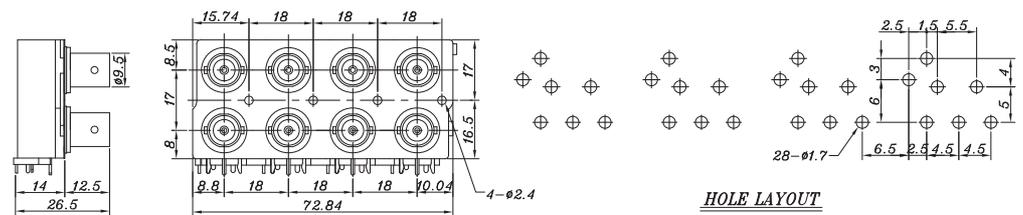
Vertical with 4 Switches



BNC8-P/B



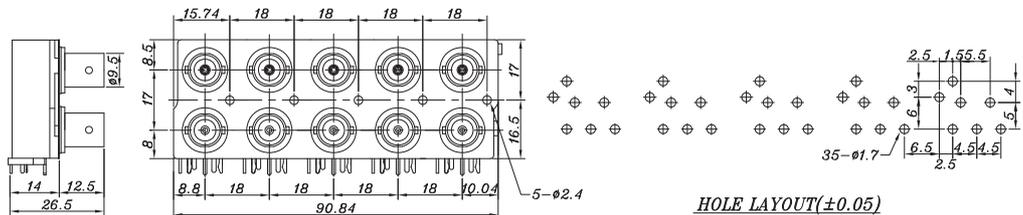
Vertical with 8 Switches



BNC10-P/B



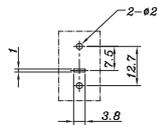
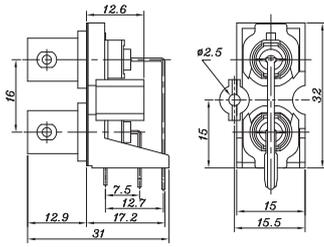
Vertical with 10 Switches



■ **BNC Receptacles**

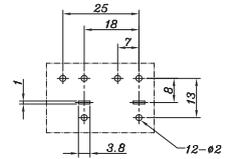
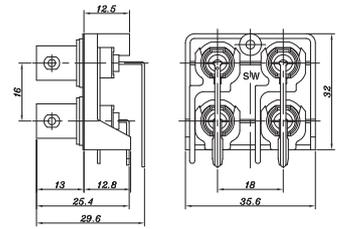
Without Switches

BNC2-P/B (N/S)



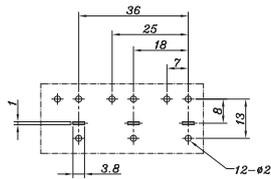
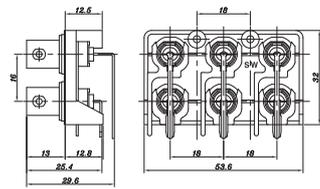
Front View

BNC4-P/B (N/S)



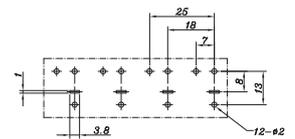
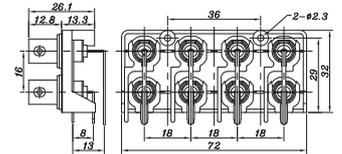
Front View

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.

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

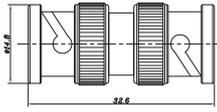
Material Used / Finish

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

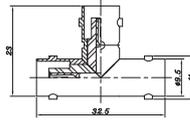
Plug - Plug Adapter



Product Number

BNC-A-PP

Jack - Jack - Jack Adapter



Product Number

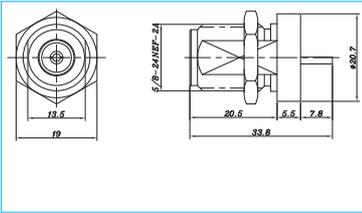
BNC-TA-JJJ



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

■ N Receptacles

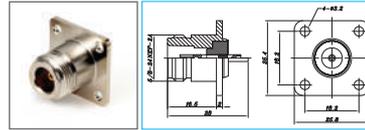
Bulkhead



Product Number

N-BR

Panel

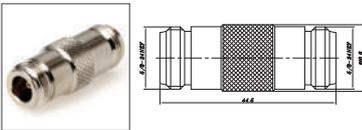


Product Number

N-R

■ N Adapter & Others

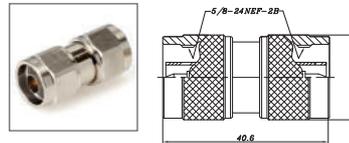
Jack - Jack Adapter



Product Number

N-A-JJ

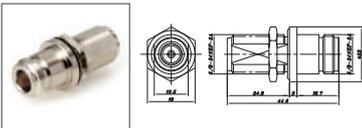
Plug - Plug Adapter



Product Number

N-A-PP

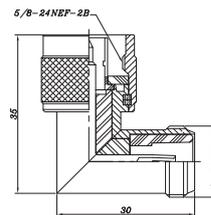
Jack - Jack Bulkhead Adapter



Product Number

N-BA-JJ

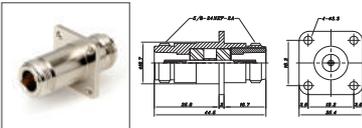
Plug - Jack Right-angle Adapter



Product Number

N-LA-PJ

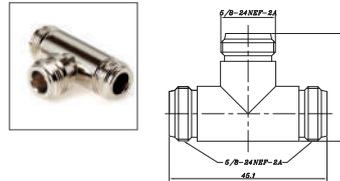
Jack - Jack Panel Adapter



Product Number

N-PA-JJ

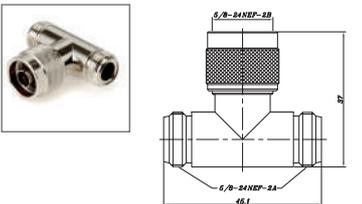
Jack - Jack - Jack Adapter



Product Number

N-TA-JJJ

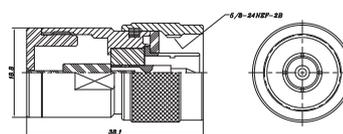
Jack - Plug - Jack Adapter



Product Number

N-TA-JPJ

Plug Terminator

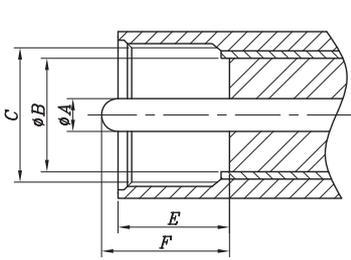


Product Number

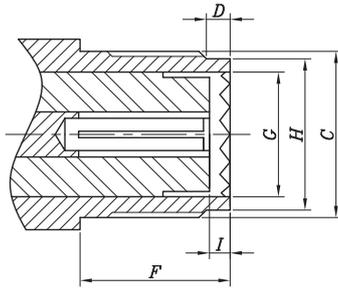
N-DUMMY

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

■ M Interface Dimensions



Plug



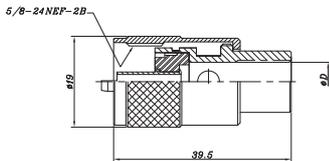
Jack

Interface Dimension

SMA	Plug		Jack	
	min.	max.	min.	max.
Ø A	3,91			
Ø B	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

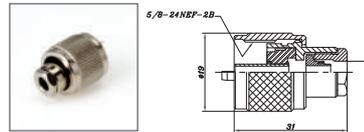
Straight



Product Number

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

Straight (Clamp)

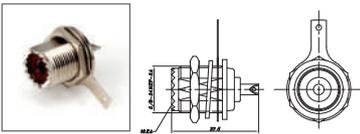


Product Number

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

■ M Receptacles

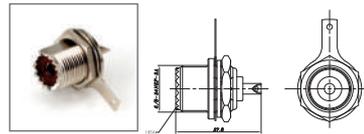
Bulkhead Front Nut



Product Number

CH-239(A)

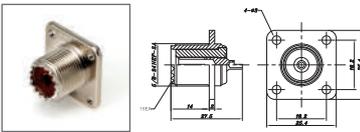
Bulkhead Back Nut



Product Number

CH-239(B)

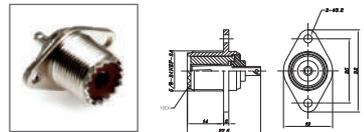
Panel



Product Number

SO-239

Panel (Narrow Flange)

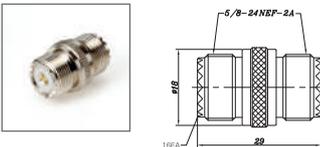


Product Number

SO-239(D)

■ M Adapter & Others

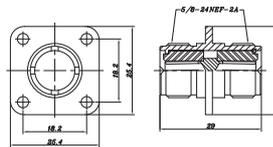
Jack-Jack Adapter



Product Number

M-A-JJ

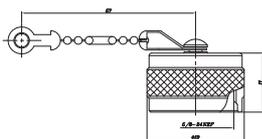
Jack-Jack Panel Adapter



Product Number

M-PA-JJ

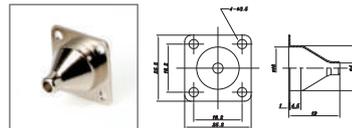
Jack Cap



Product Number

M-JC

Hood



Product Number

M-H

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

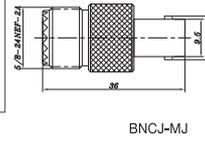


Between Series Part Numbering



Between-Series Adapter

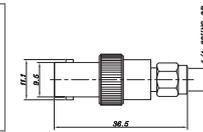
BNC - M Adapter



BNCJ-MJ

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

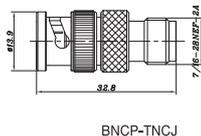
BNC - SMA Adapter



BNCJ-SMAP

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

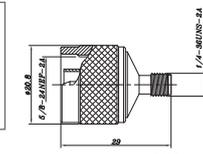
BNC - TNC Adapter



BNCP-TNCJ

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

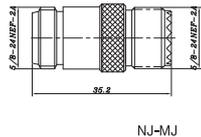
N - SMA Adapter



NJ-BNCJ

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

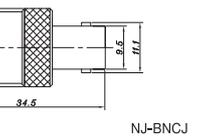
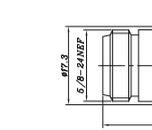
N - M Adapter



NJ-MJ

Product Number	N	M
NP-MP	Plug	Plug
NP-MJ	Plug	Jack
NJ-MP	Jack	Plug
NJ-MJ	Jack	Jack

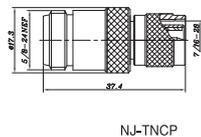
N - BNC Adapter



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.

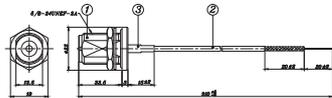




Applications

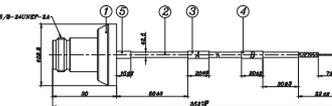
- Military communication

■ **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

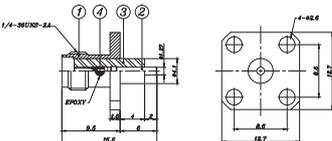
■ **MRF-SW-5759-XX**



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.

D-tap Series D-tap Plug / Jack

■ D-tap



Features

- SW-DTAP-2P
- SW-DTAP-2J
- Standard and Custom Design

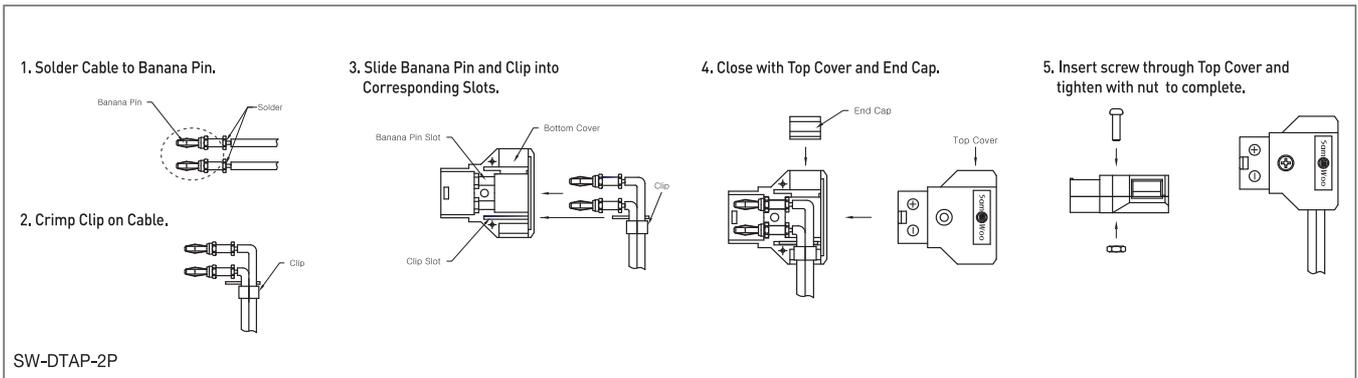
Applications

- Power LED Light
- LCD Monitor
- HDV
- Power Supply
- Battery Power

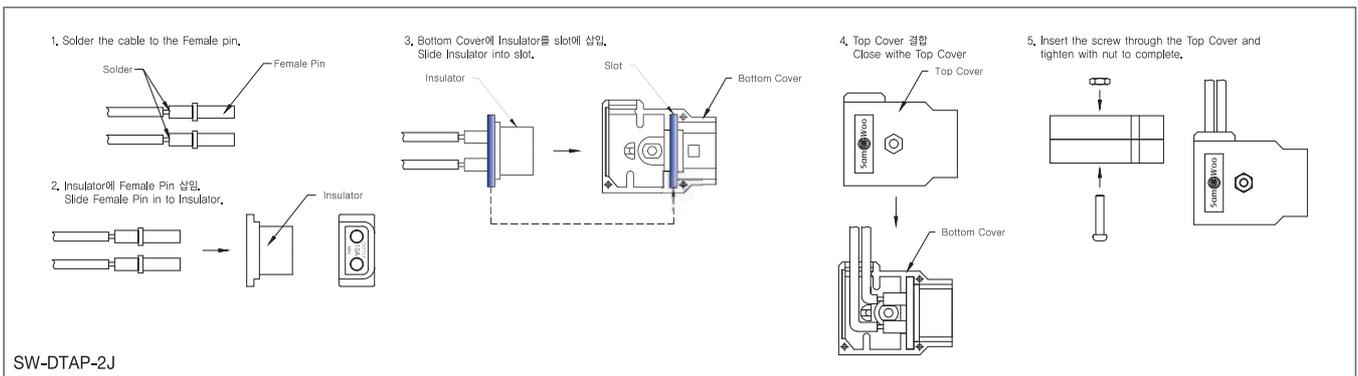
■ Major Performance

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

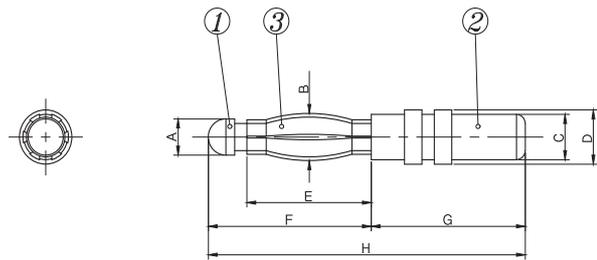
Applications

- 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

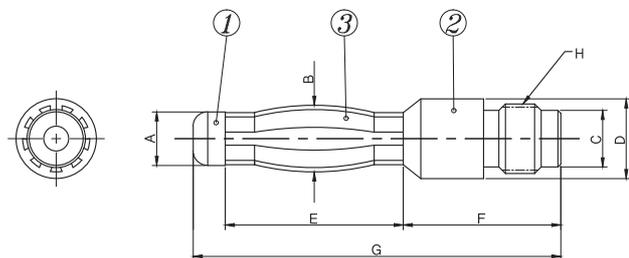
POWER PIN (Ni / Au) - 2,1



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

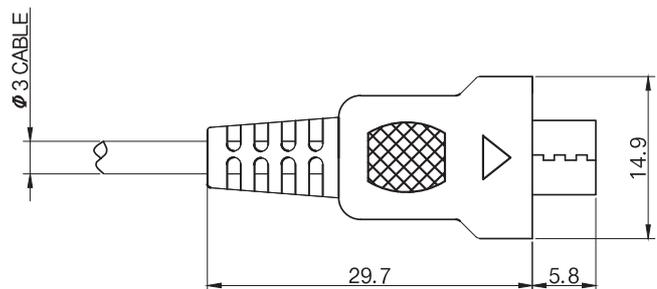
Major Performance

No.	Item	Standard Data
①	Contact Resistance (Max.)	30m Ω
②	Insulation Resistance (Min.)	1,000M Ω
③	Dielectric Withstanding Voltage (Min.)	500V AC

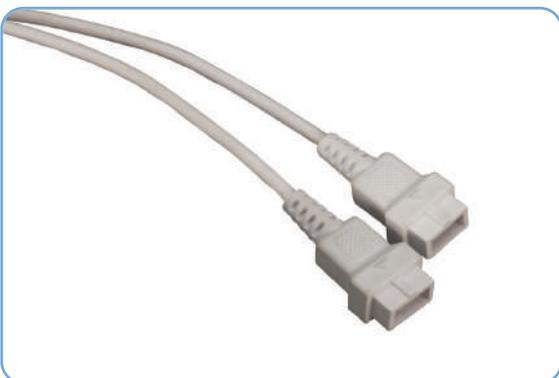
Micro USB 5PIN Male Cable Assembly (IP67)



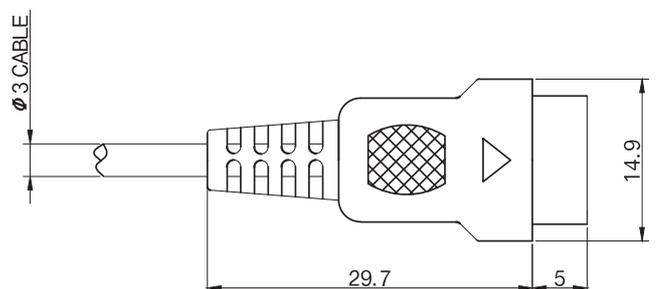
※ Customization Service Available



Micro USB 5PIN Female Cable Assembly (IP67)



※ Customization Service Available



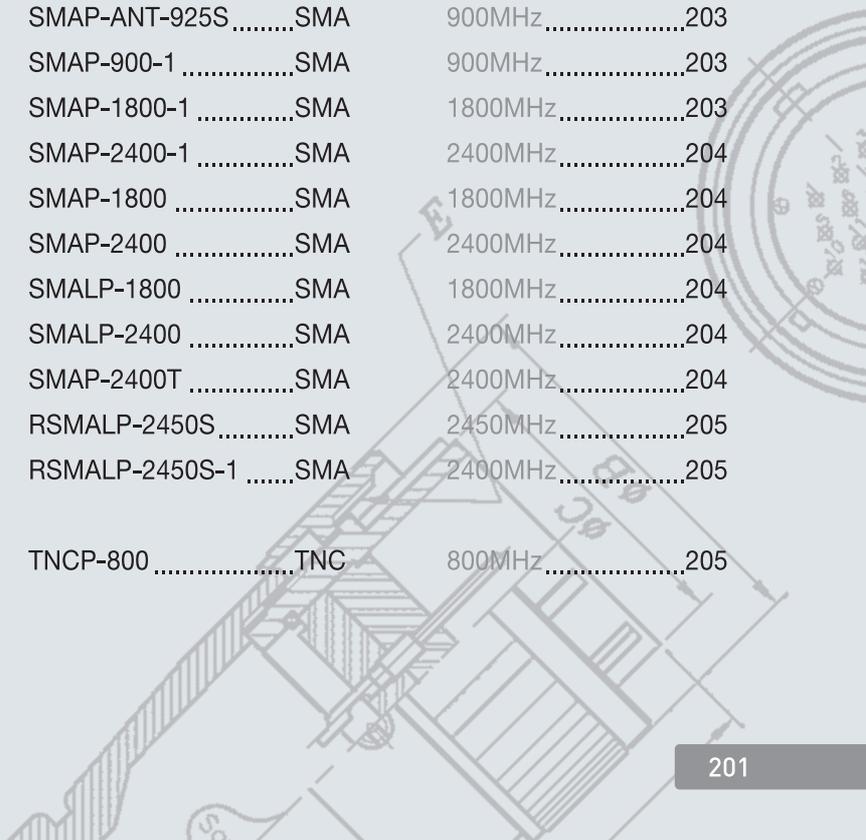
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



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



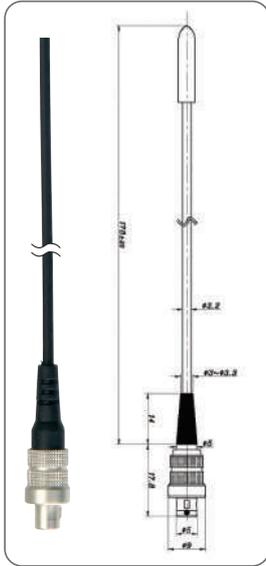
Bare SPB plug and receptacle also available.
For more information on Circular Connectors refer to p. 39.



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 \pm 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 $^{\circ}$ C ~ + 70 $^{\circ}$ C

■ SMAP-1800

- 1/2 Wavelength Dipole Antenna
- 1800MHz Band

Electrical Performance	Specifications
Frequency Range	1170~1990MHz
Nominal Impedance	50 Ω Normal \pm 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 $^{\circ}$ C ~ + 70 $^{\circ}$ C

■ SMAP-2400

- 1/2 Wavelength Dipole Antenna
- 2400MHz Band

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50 Ω Normal \pm 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 $^{\circ}$ C ~ + 70 $^{\circ}$ C

■ SMALP-1800

- 1/2 Wavelength Dipole Antenna
- 90 $^{\circ}$ Fixed 1800MHz Band

Electrical Performance	Specifications
Frequency Range	1170~1990MHz
Nominal Impedance	50 Ω Normal \pm 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 $^{\circ}$ C ~ + 70 $^{\circ}$ C

■ SMALP-2400

- 1/2 Wavelength Dipole Antenna
- 90 $^{\circ}$ Fixed 2400MHz Band

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50 Ω Normal \pm 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 $^{\circ}$ C ~ + 70 $^{\circ}$ C

■ SMAP-2400T

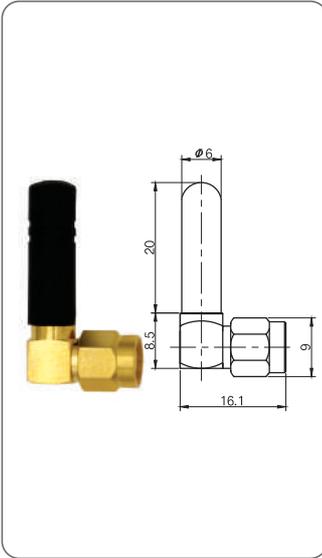
- 90 $^{\circ}$ Tilting 2400MHz Bank
- High Gain

Electrical Performance	Specifications
Frequency Range	2350~2480MHz
Nominal Impedance	50 Ω Normal \pm 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 $^{\circ}$ C ~ + 70 $^{\circ}$ C

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

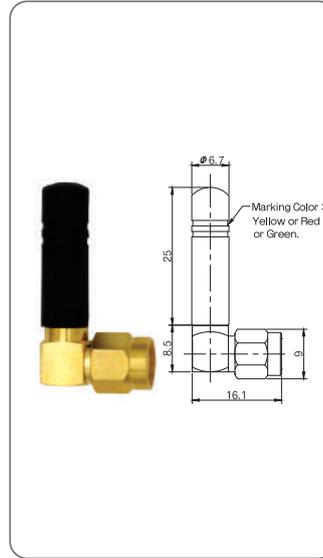
■ RSMALP-2450S



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

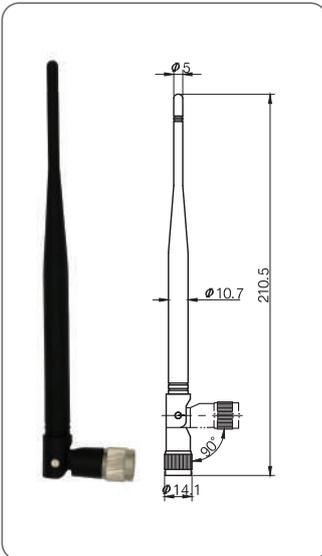


Electrical Performance	Specifications
Frequency Range	2350~2600MHz
Center Frequency	2,45GHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2,0:1
Gain(dBi)	1,6dBi

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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