

ST Series Part Numbering



Features

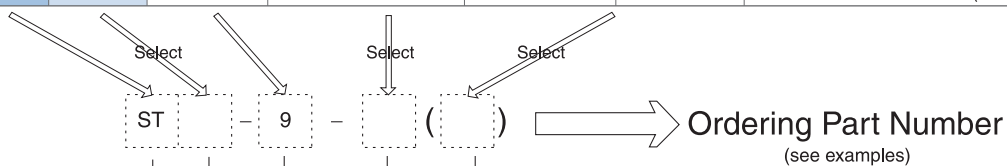
- Super-miniature size with multiple contact
- Safe insert system preventing male damage

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



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

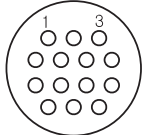
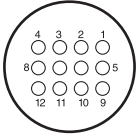
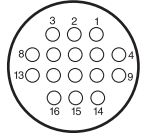
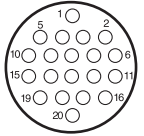
12,14,16,20

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.

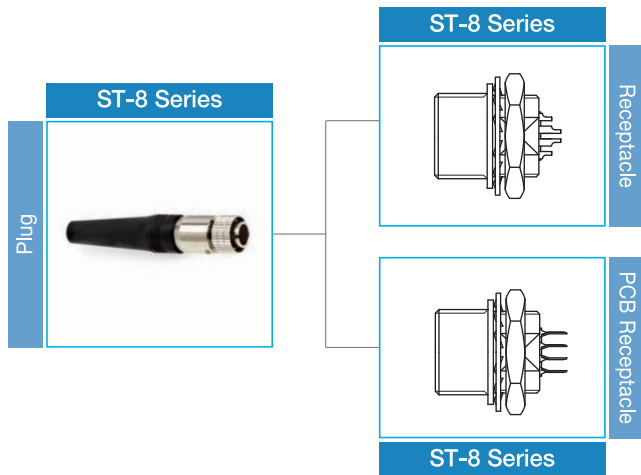
• Consult Sam Woo Electronics for the latest specifications.

⁴ Connector contact arrangement is from solder pot.

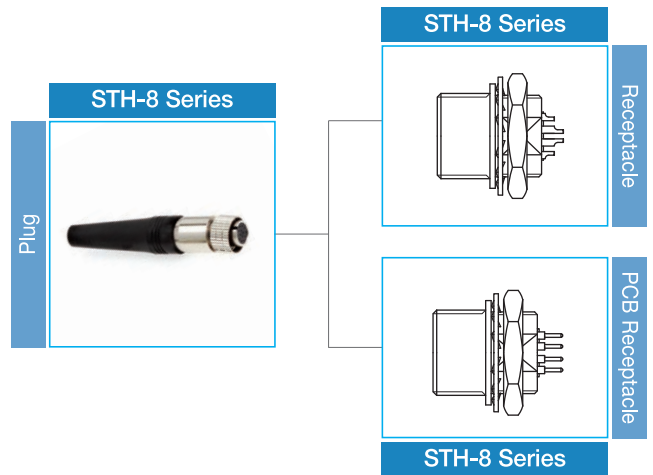
Material Used / Finish

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

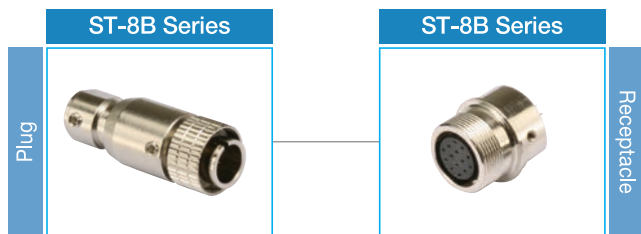
■ ST-8 Series



■ STH-8 Series



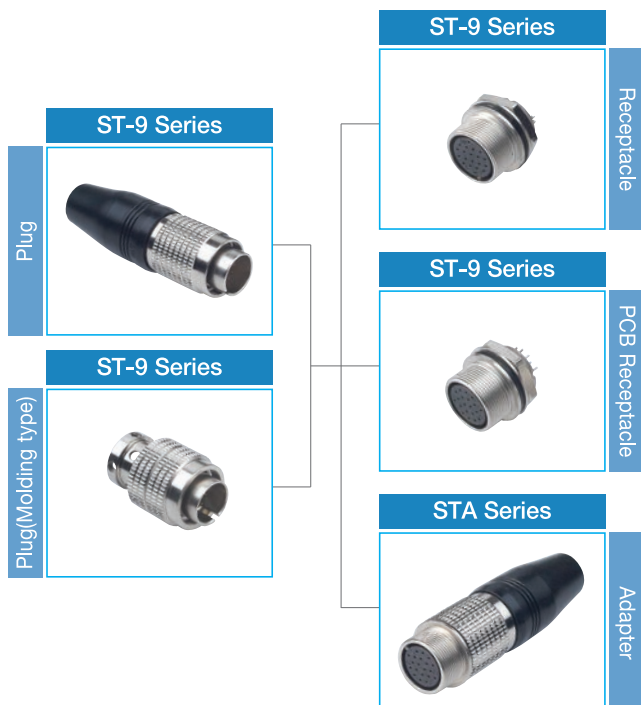
■ ST-8B Series



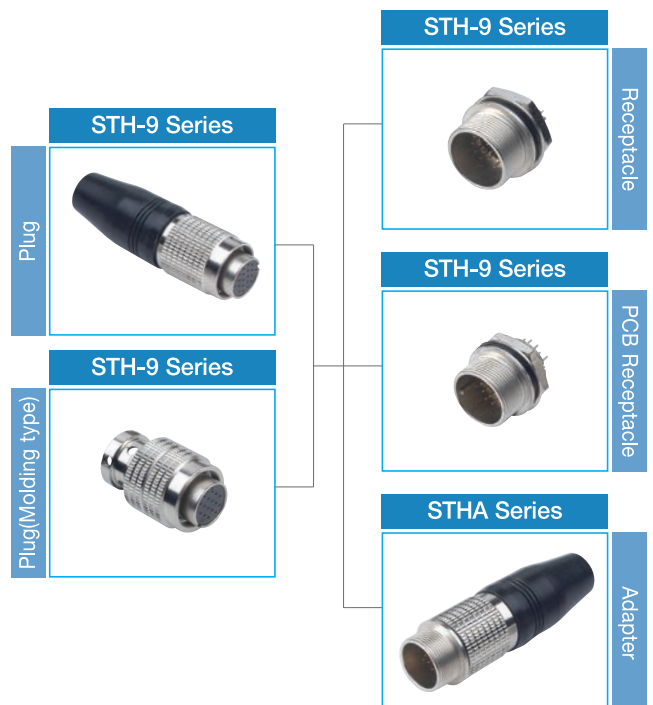
■ STH-8B Series



■ ST-9 Series

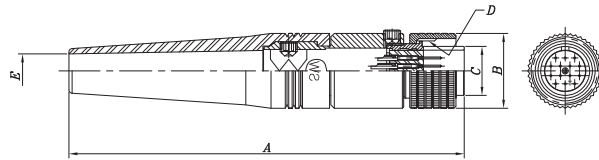


■ STH-9 Series



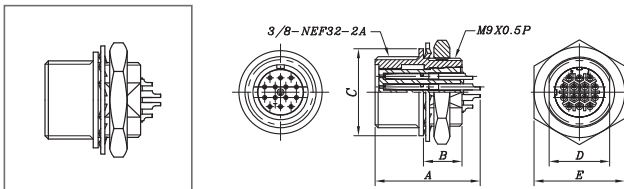
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ ST-8 Plug



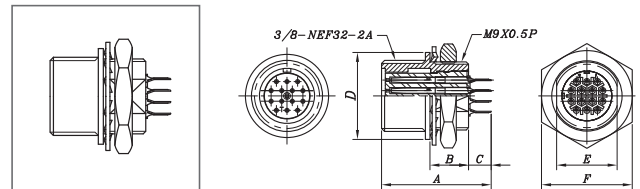
Product Number	A	B	C	D	E
ST-8-14(P)	58	11	7,2	3/8-32NEF-2B	5

■ ST-8 solder Type Receptacle



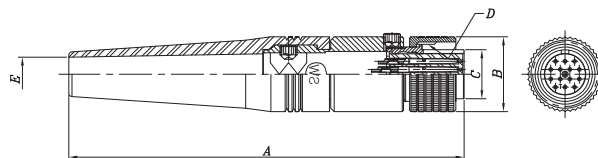
Product Number	A	B	C	D	E
ST-8-14(R)	13,9	5,1	11,5	8	12

■ ST-8 PCB Type Receptacle



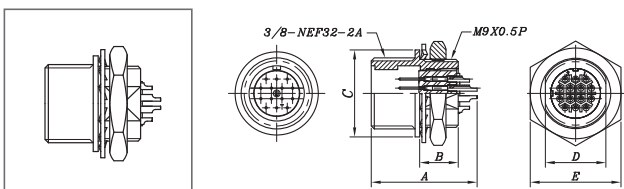
Product Number	A	B	C	D	E	F
ST-8-14(RPCB)	14,5	5,1	3	11,5	8	12

■ STH-8 Plug



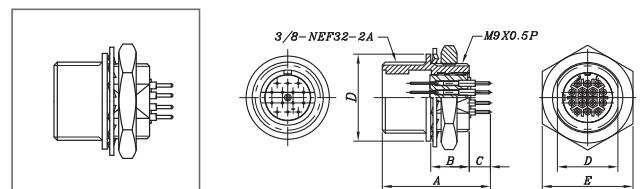
Product Number	A	B	C	D	E
STH-8-14(P)	58	11	7,2	3/8-32NEF-2B	5

■ 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



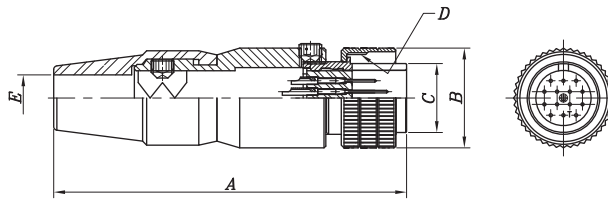
Product Number	A	B	C	D	E	F
STH-8-14(RPCB)	14,3	5,1	2,8	11,5	8	12

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

ST-8B Series

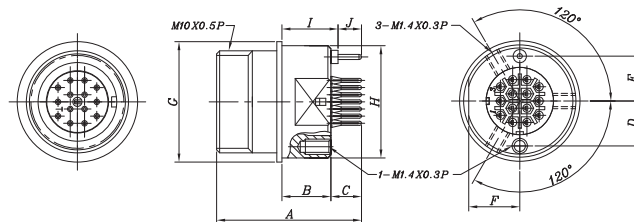
Screw-on Type Male / Female Plug, Receptacle

ST-8B Plug



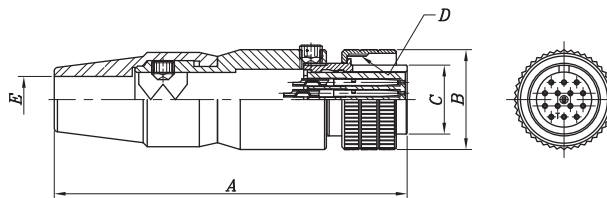
Product Number	A	B	C	D	E
ST-8B-14(P)	38,9	11	7,6	M14×1,0P	5,1

ST-8B Receptacle



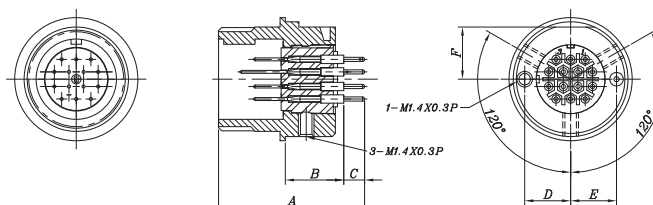
Product Number	A	B	C	D	E	F	G	H	I	J
ST-8B-14(RGPCB)	14,2	4,8	3	4,4	4,4	5	11,8	10,95	5,5	2,3

STH-8B Plug



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

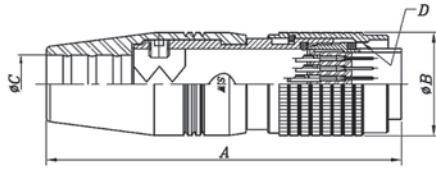
STH-8B Receptacle



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

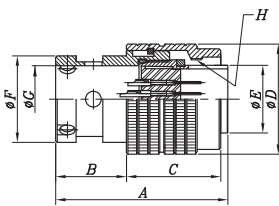
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ **ST-9 Plug**



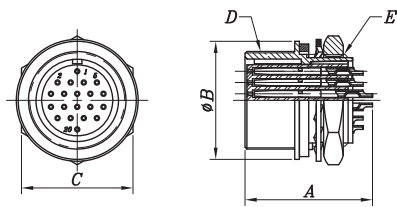
Product Number	A	ø B	ø C	D
ST-9-12(P)	43,0	12,5	7,0	M10,5×0,5P
ST-9-16(P)				
ST-9-20(P)				

■ **ST-9 Molding Type Plug**



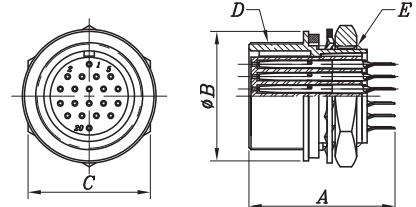
Product Number	A	B	C	ø D	ø E	ø F	ø G	H
ST-9-12(PLM1)	22	9	12	14	8,6	11	8,5	M10,5×0,5P
ST-9-16(PLM1)								
ST-9-20(PLM1)								

■ **ST-9 Solder Type Receptacle**



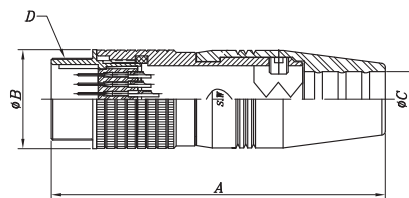
Product Number	A	ø B	C	D	E
ST-9-12(R)	13,6	12,6	12,0	M10,5×0,5P	M10×0,75P
ST-9-16(R)					
ST-9-20(R)					

■ **ST-9 PCB Type Receptacle**



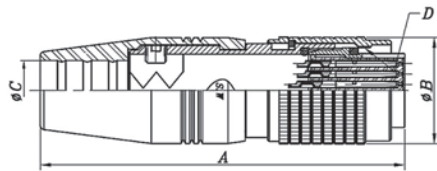
Product Number	A	ø B	C	D	E
ST-9-12(RPCB)	14,1	12,6	12,0	M10,5×0,5P	M10×0,75P
ST-9-16(RPCB)					
ST-9-20(RPCB)					

■ **STA-9 Adapter**



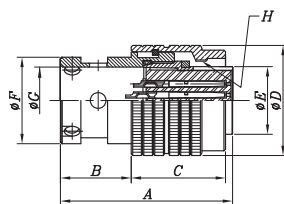
Product Number	A	ø B	ø C	D
STA-9-12	42,6	12,6	7,0	M10,5×0,5P
STA-9-16				
STA-9-20				

■ STH-9 Plug



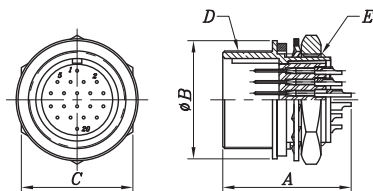
Product Number	A	ø B	ø C	D
STH-9-12(P)	43,0	12,5	7,0	M10,5×0,5P
STH-9-16(P)				
STH-9-20(P)				

■ STH-9 Molding Type Plug



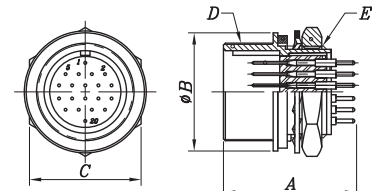
Product Number	A	B	C	ø D	ø E	ø F	ø G	H
STH-9-12(PLM1)	22	9	12	14	8,6	11	8,5	M10,5×0,5P
STH-9-16(PLM1)								
STH-9-20(PLM1)								

■ STH-9 Solder Type Receptacle



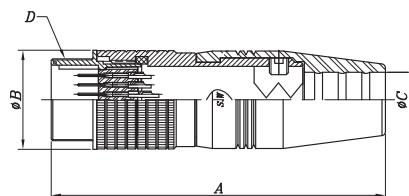
Product Number	A	ø B	C	D	E
STH-9-12(R)	13,6	12,6	12,0	M10,5×0,5P	M10×0,75P
STH-9-16(R)					
STH-9-20(R)					

■ STH-9 PCB Type Receptacle



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

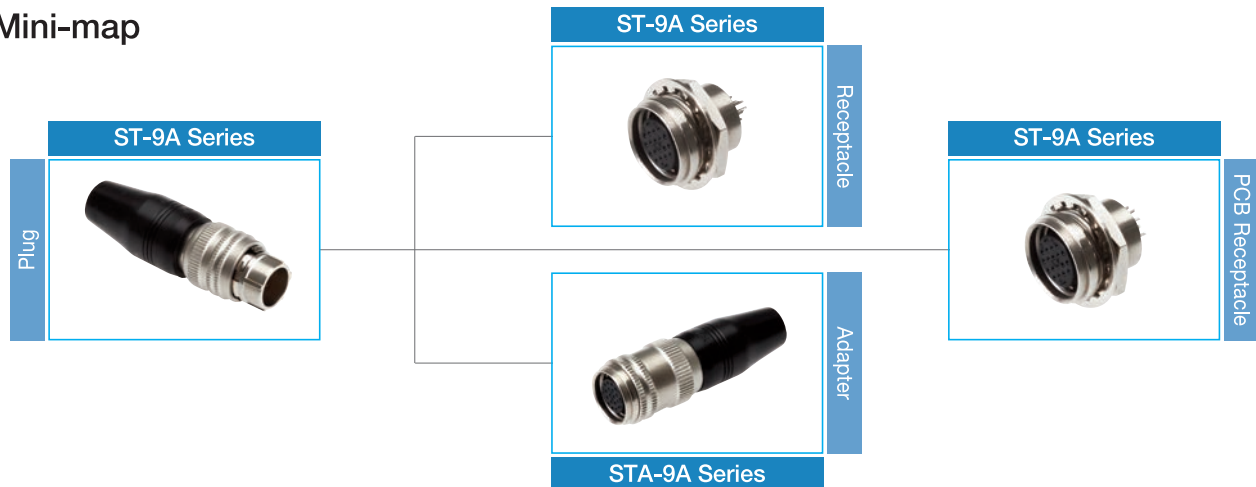
■ STHA-9 Adapter



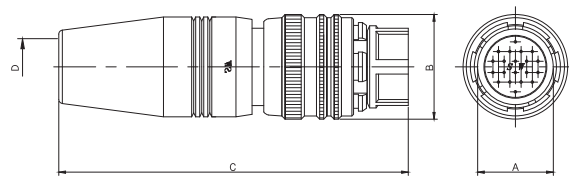
Product Number	A	ø B	ø C	D
STHA-9-12	42,6	12,6	7,0	M10,5×0,5P
STHA-9-16				
STHA-9-20				

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

■ Mini-map

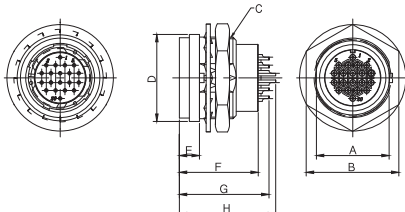


■ ST-9A Plug



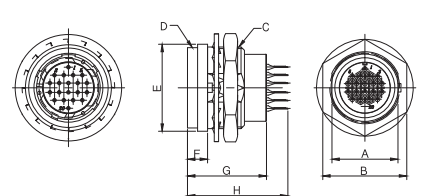
Product Number	ø A	ø B	C	ø D
ST-9A-12(P)	9,4	13	(43,4)	7
ST-9A-16(P)				
ST-9A-20(P)				

■ ST-9A Receptacle



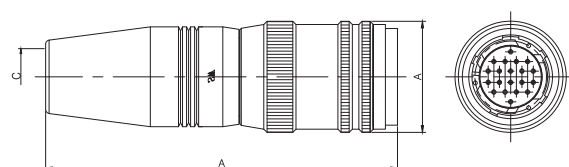
Product Number	A	B	C	ø D	E	F	G	H
ST-9A-12(R)	11	14	M12×0,75P	13	3	11,8	13,4	14,4
ST-9A-16(R)								
ST-9A-20(R)								

■ ST-9A PCB Receptacle



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

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

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

^① See below for information on SA-HCT.

Diagram 1

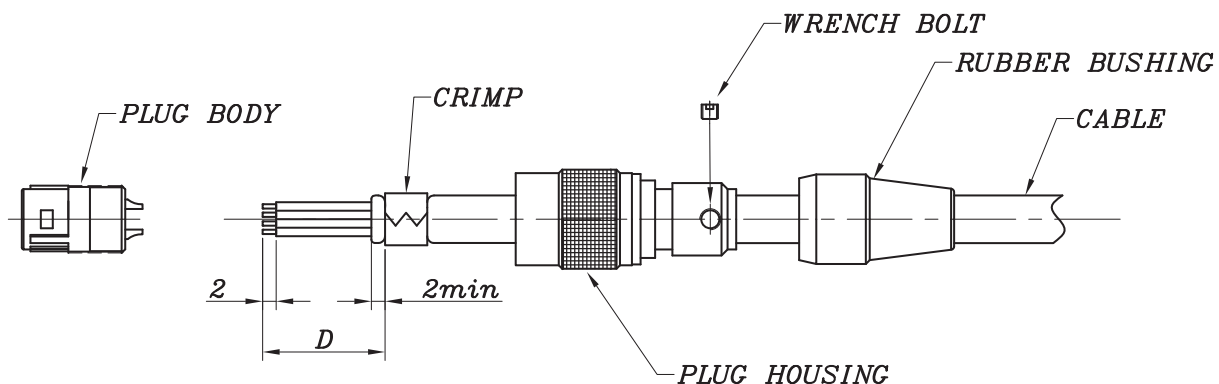


Table 1

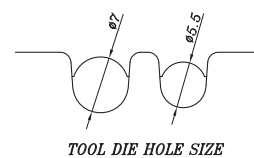
unit : mm

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)

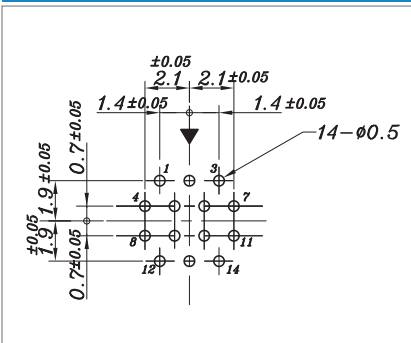


Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.

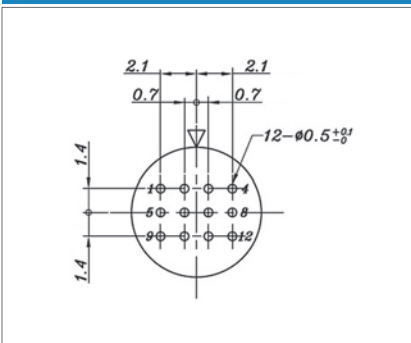


ST Receptacle PCB Hole Layout

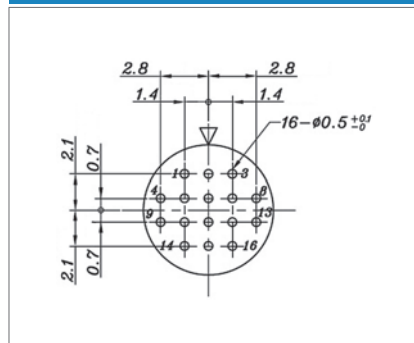
8 size - 14 core



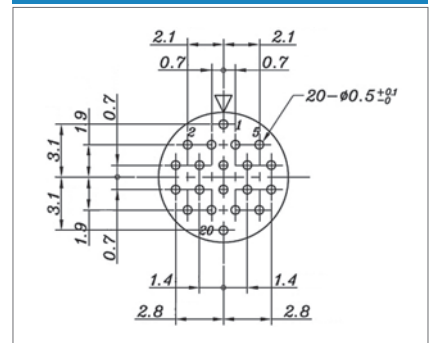
9 size - 12 core



9 size - 16 core

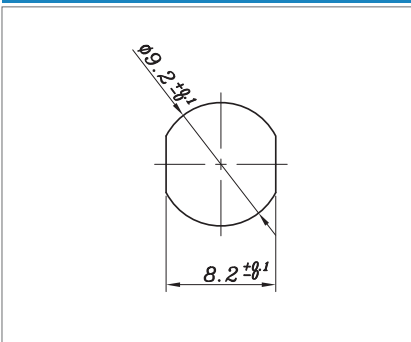


9 size - 20 core

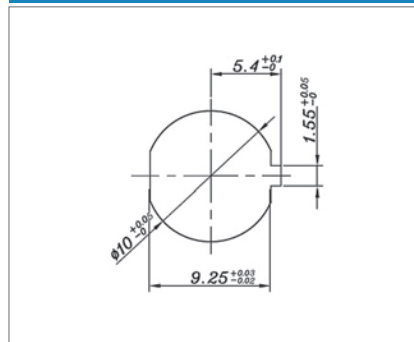


ST Receptacle Panel Layout

8 size receptacle



9 size receptacle





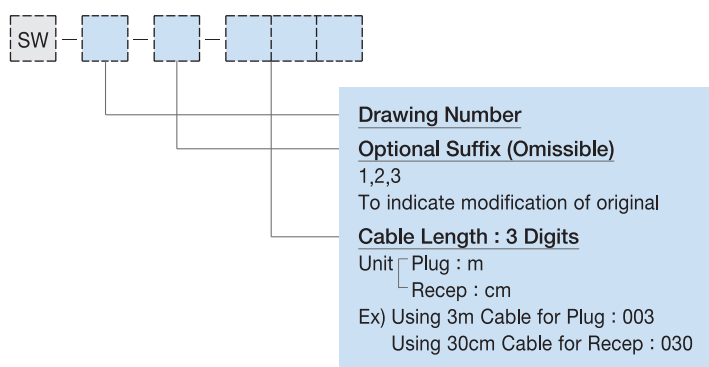
Features

- 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



■ 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.

