

# SN Series Part Numbering



## Features

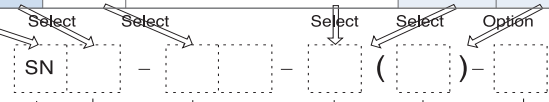
- Push-pull technology
- Miniature circular
- Light weight
- Low cost

## 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						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					●	●	S	Adapter		
						●	●	P	Adapter		
					2		●	P	Plug (Screw-on type)		
					2A		●	S	Receptacle (Screw-on type)		
					●	●	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		Size 10					
	4	5	2	3	4	9	10	12
Withstanding Voltage (per min) <sup>1</sup>	AC 300V	AC 300V	AC 500V	AC 500V	AC 500V	AC 300V	AC 300V	AC 300V
Current	2A	2A	3A	3A	3A	2A	2A	2A
Insulation Resistance (Minimum) <sup>2</sup>	1,000M Ω	1,000M Ω	1,000M Ω	1,000M Ω	1,000M Ω	1,000M Ω	1,000M Ω	1,000M Ω
Contact Resistance (Maximum) <sup>3</sup>	10m Ω	10m Ω	10m Ω	10m Ω	10m Ω	10m Ω	10m Ω	10m Ω
Solder Pot Inside Diameter	∅ 0,7	∅ 0,7	∅ 1,0	∅ 1,0	∅ 1,0	∅ 0,7	∅ 0,7	∅ 0,7
Wire Gauge (Maximum)	AWG26	AWG26	AWG20	AWG20	AWG20	AWG26	AWG26	AWG26
Contact Arrangement								

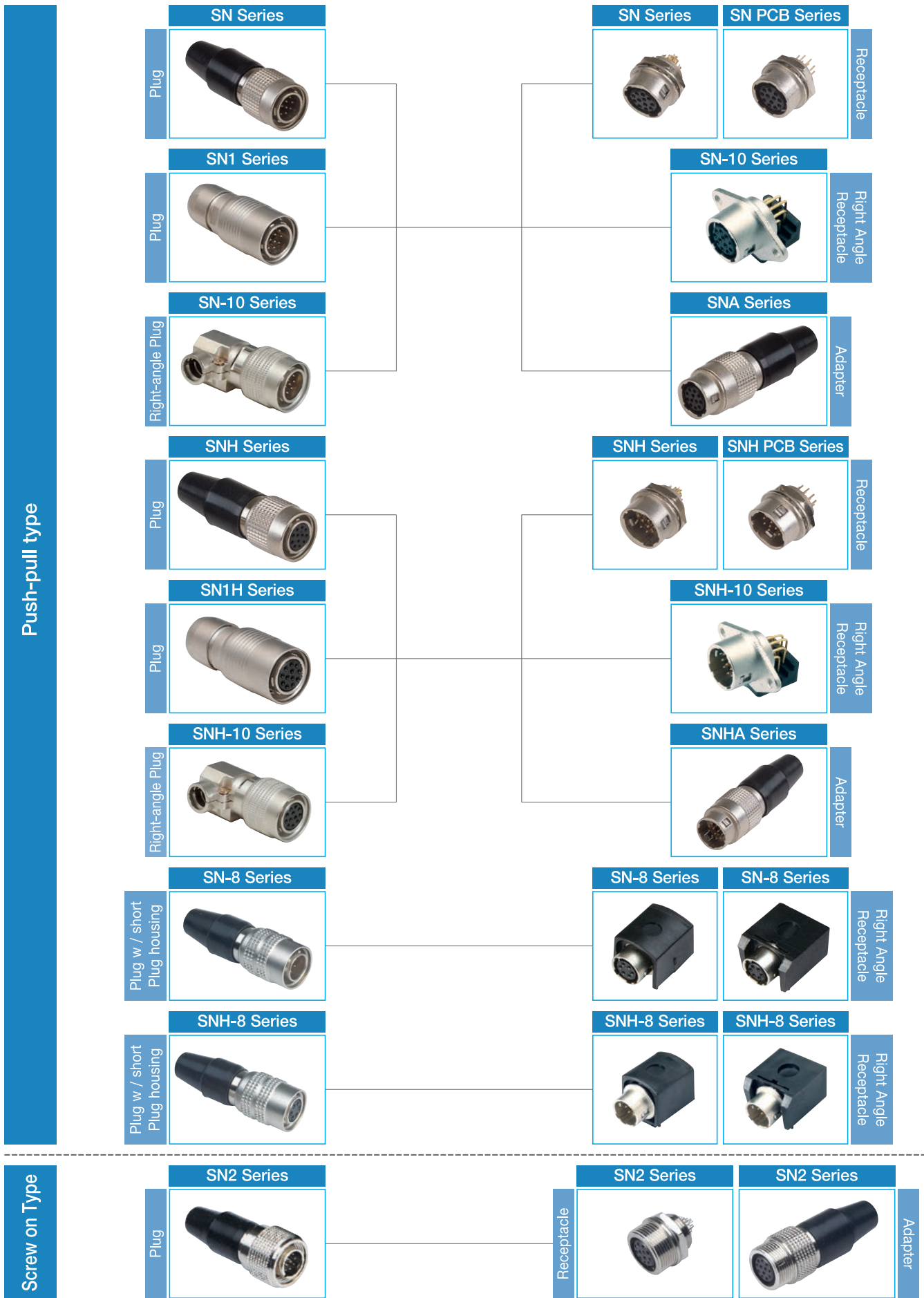
<sup>1</sup> Withstanding voltage is the tested voltage value in this table.  
<sup>2</sup> Insulation resistance is measured at DC 100V.  
<sup>3</sup> Contact resistance is measured at DC 1A.  
 • Values are from tested items and may not apply to all connectors.  
 • Specifications subject to change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

**Contact Diameter**  
 ∅ 0,55mm ∅ 1,0mm

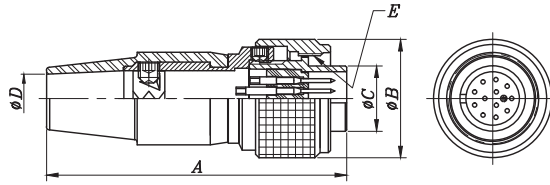
■ Material Used / Finish

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

# SN Series Mini-map

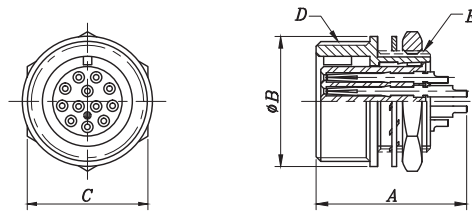


■ SN2 Plug



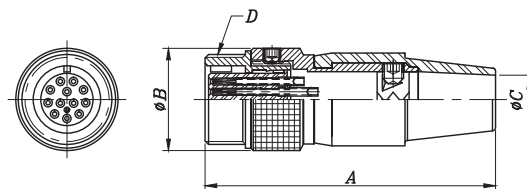
Product Number	A	∅ B	∅ C	∅ D	E	Product Number	A	∅ B	∅ C	∅ D	E
SN2-8-4 (P)	35,1	12	7	5,1	M10×0,75P	SN2-10-2 (P)	43,0	17,0	9,4	7,0	M13×0,75P
SN2-8-5 (P)						SN2-10-3 (P)					
SN2-8-6 (P)						SN2-10-4 (P)					
	SN2-10-9 (P)										
	SN2-10-10 (P)										
	SN2-10-12 (P)										

■ 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

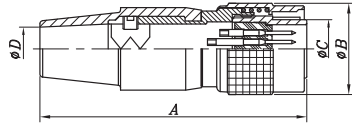


Product Number	A	∅ B	∅ C	D	Product Number	A	∅ B	∅ C	D
SN2A-8-4	41,7	14,7	7,0	M13×0,75P	SN2A-10-2	41,7	14,7	7,0	M13×0,75P
SN2A-8-5					SN2A-10-3				
SN2A-8-6					SN2A-10-4				
	SN2A-10-9								
	SN2A-10-10								
	SN2A-10-12								

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

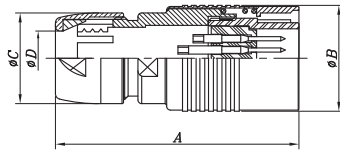
# SN Series Push-pull type SN Male Plug

## ■ SN Plug



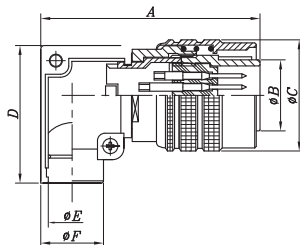
Product Number	A	ø B	ø C	ø D
SN-8-4(P)	35	11,5	7	5
SN-8-5(P)				
SN-8-6(P)				
SN-10-2(P)	43	14,9	9,4	7
SN-10-3(P)				
SN-10-4(P)				
SN-10-9(P)				
SN-10-10(P)				
SN-10-12(P)				

## ■ SN1 Plug



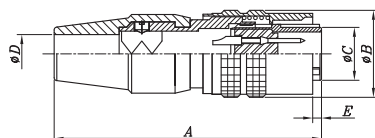
Product Number	A	ø B	ø C	ø D
SN1-8-4(P)	28	11,0	9,0	5,2
SN1-8-5(P)				
SN1-8-6(P)				
SN1-10-2(P)	32	14,0	12,0	7,2
SN1-10-3(P)				
SN1-10-4(P)				
SN1-10-9(P)				
SN1-10-10(P)				
SN1-10-12(P)				

## ■ 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)						

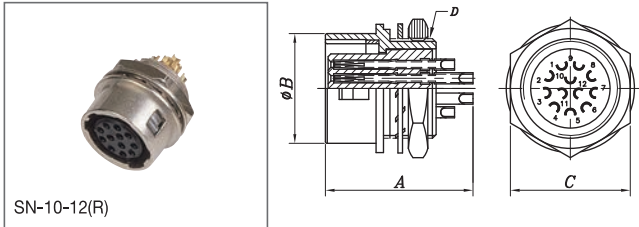
## ■ SN Plug (Short plug housing)



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.

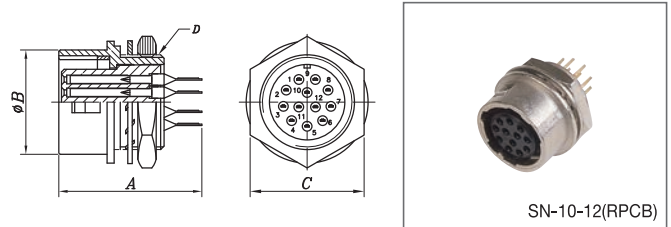
■ SN Receptacle



SN-10-12(R)

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

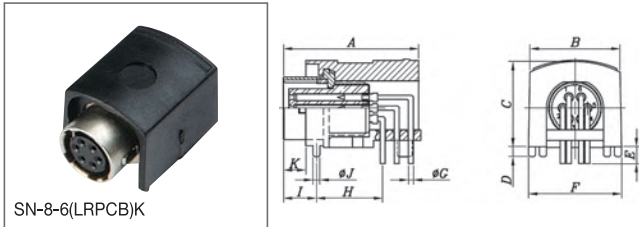
■ SN PCB Receptacle



SN-10-12(RPCB)

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

■ SN Right Angle PCB Receptacle (Any Type)

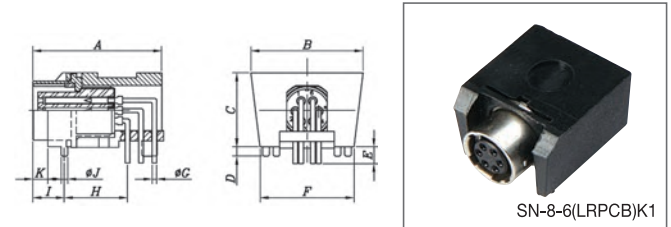


SN-8-6(LRPCB)K

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)

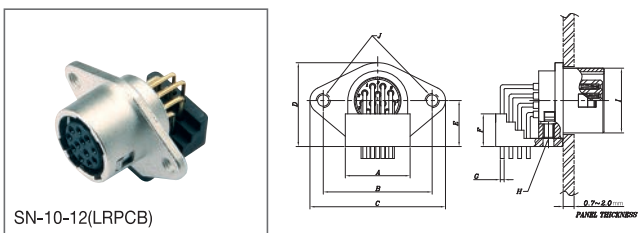


SN-8-6(LRPCB)K1

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											

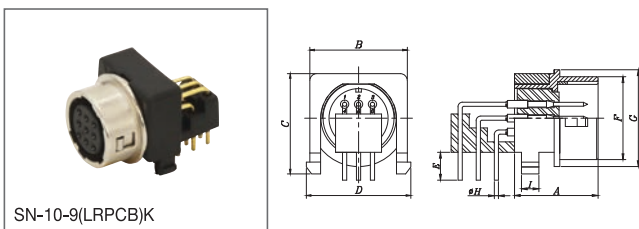
! SN-8-4(LRPCB)K1, SN-8-6(LRPCB)K1 only mates with SN-8-4(PS), SN-8-6(PS) plugs.

■ SN Right Angle PCB Receptacle



SN-10-12(LRPCB)

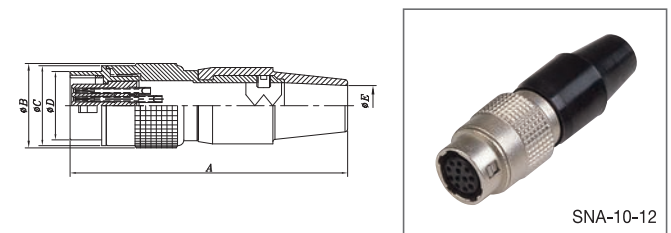
Product Number	A	B	C	D	E	F	φ G	H	φ I	J
SN-10-12(LRPCB)	11,9	20	24,9	15,4	8,5	6	0,7	M2,0 ×0,4P	11,9	M2,6 ×0,45P



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

■ SNA Adapter



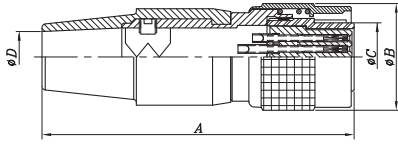
SNA-10-12

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-8-5					
SNA-8-6					
	48,0	14,9	13,9	11,9	7,0
SNA-10-2					
SNA-10-3					
SNA-10-4					
SNA-10-9					
SNA-10-10					
SNA-10-12					

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

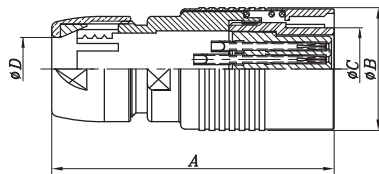
# SN Series Push-pull type SNH Female Plug

## ■ SNH Plug



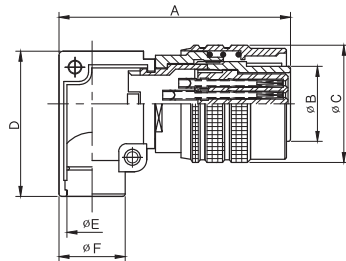
Product Number	A	φ B	φ C	φ D
SNH-8-4(P)	35	11,5	7	5
SNH-8-5(P)				
SNH-8-6(P)				
SNH-10-2(P)	43	14,9	9,4	7
SNH-10-3(P)				
SNH-10-4(P)				
SNH-10-9(P)				
SNH-10-10(P)				
SNH-10-12(P)				

## ■ SN1H Plug



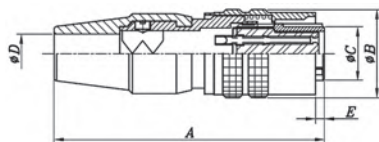
Product Number	A	φ B	φ C	φ D
SN1H-8-4(P)	28	11,0	9,0	5,2
SN1H-8-5(P)				
SN1H-8-6(P)				
SN1H-10-2(P)	32	14,0	12,0	7,2
SN1H-10-3(P)				
SN1H-10-4(P)				
SN1H-10-9(P)				
SN1H-10-10(P)				
SN1H-10-12(P)				

## ■ 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)						

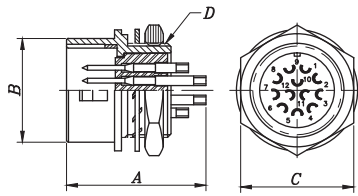
## ■ SNH Plug (Short plug housing)



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)					

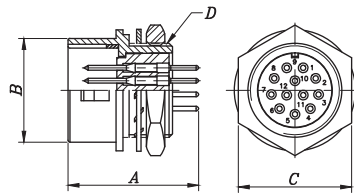
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SNH Receptacle



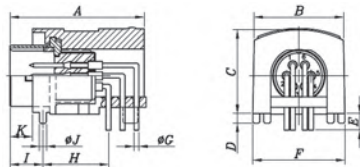
Product Number	A	φ B	C	D	
SNH-8-4 (R)	14,2	8,8	10,0	M8×0,5P	
SNH-8-5 (R)					
SNH-8-6 (R)					
SNH-10-2(R)	16,2	11,9	13,0		M11×0,75P
SNH-10-3(R)					
SNH-10-4(R)					
SNH-10-9(R)					
SNH-10-10(R)					
SNH-10-12(R)					

■ 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)					

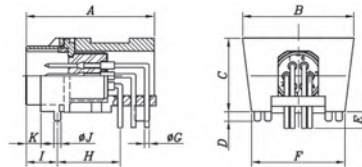
■ SNH Right Angle PCB Receptacle (Any Type)



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.

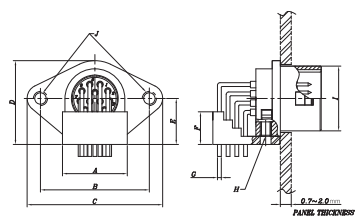
■ SNH Right Angle PCB Receptacle (Magic Type)



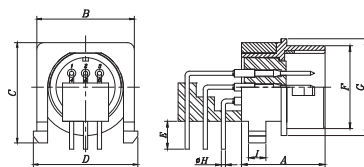
Product Number	A	B	C	D	E	F	φ G	H	I	φ J	K
SNH-8-4(LRPCB)K1	19,2	16,7	11,0	1,3	2,4	14,0	0,7	9,4	4,7	1,0	2,2
SNH-8-6(LRPCB)K1											

! 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

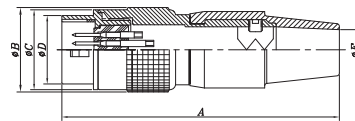


Product Number	A	B	C	D	E	F	φ G	H	φ I	J
SNH-10-12(LRPCB)	11,9	20	24,9	15,4	8,5	6	0,7	M2,0 ×0,4P	11,9	M2,6 ×0,45P



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 0,129mm<sup>2</sup>(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<sup>①</sup>)
- 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.

<sup>①</sup> See below for information on SA-HCT.

Diagram 1

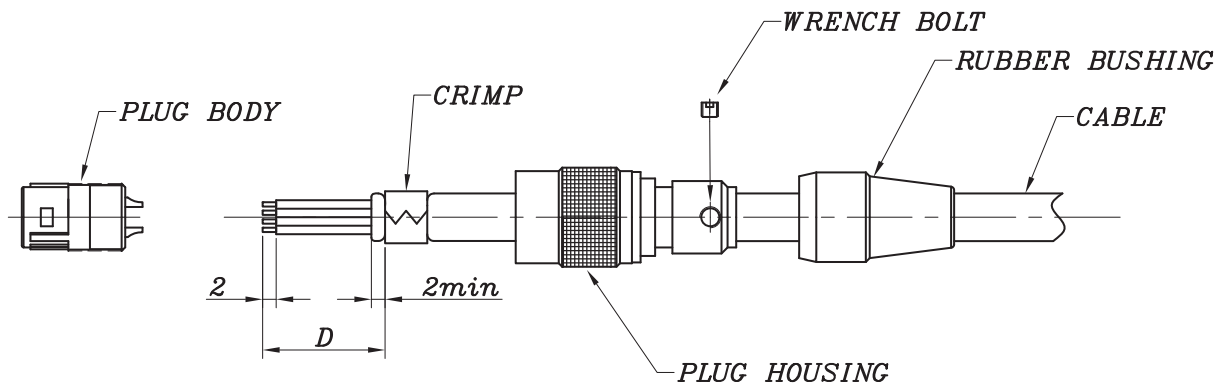


Table 1

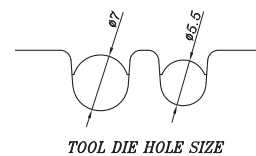
Size	Spanner Jaw	D (Dimension)	Tightening Force	Notes
SN - 8	8	10	1,5N · m (15kgf · cm)	SA-HCT size $\varnothing$ 5,5
SN - 10	10	16	2,0N · m (20kgf · cm)	SA-HCT size $\varnothing$ 7,0

unit : mm

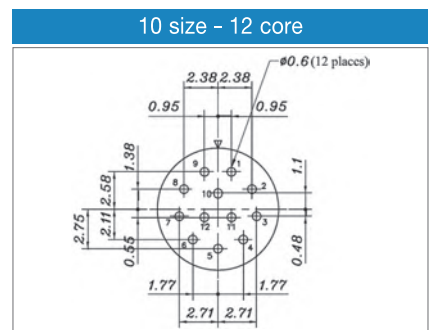
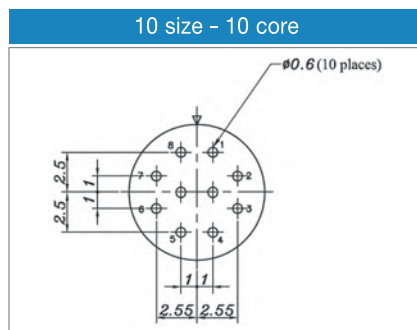
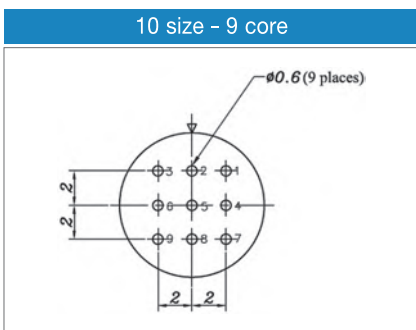
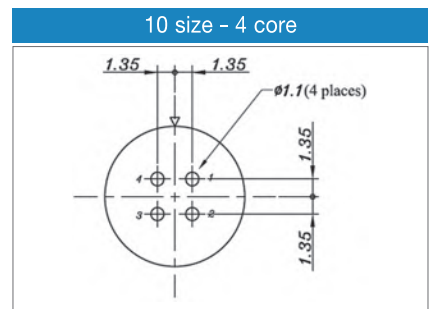
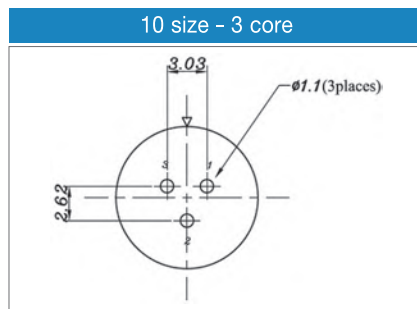
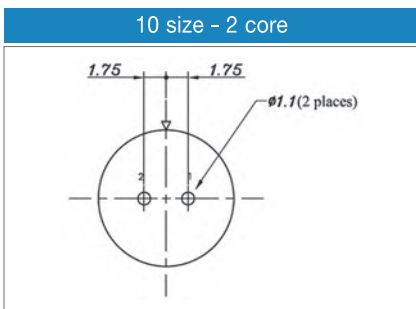
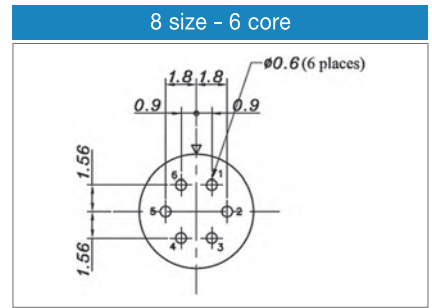
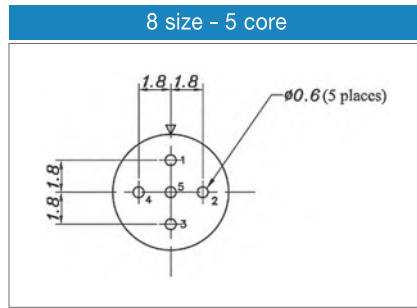
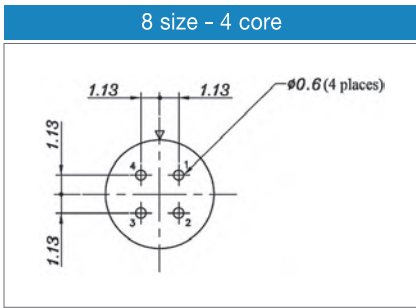
## SA-HCT (Hand Crimp Tool)



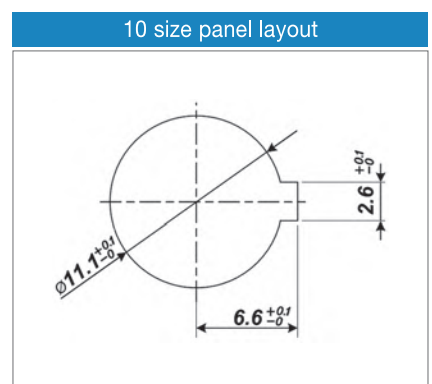
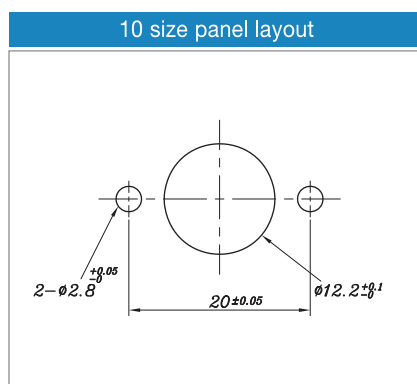
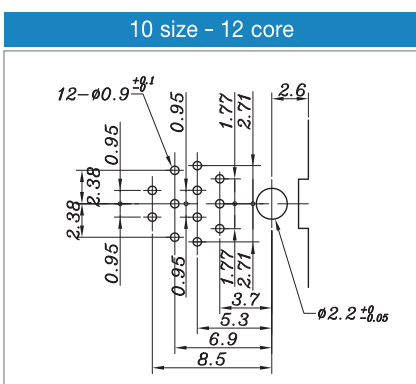
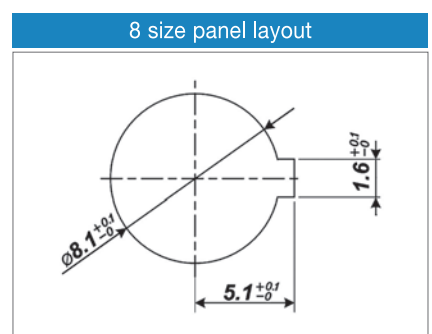
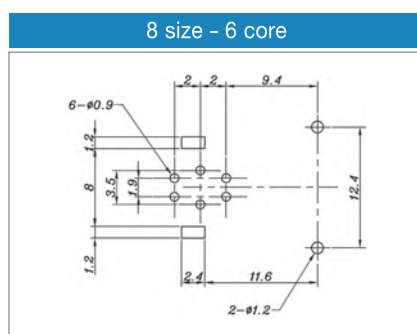
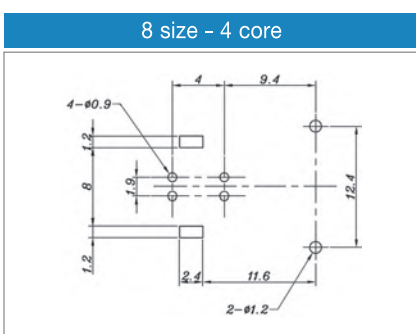
Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.



■ SN Receptacle PCB Hole Layout



■ SN Receptacle Right Angle PCB Hole Layout



■ SN Receptacle Panel Layout