



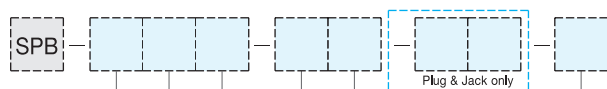
Features

- 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

■ 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

SPB-P (A Type)



SPB-P (B Type)



SPB-LP (A Type)



SPB-LP (B Type)



SPB-PT (Threaded)



SPB-PT1 (Threaded)



SPB-R (Solder Type)



SPB-R9 (Two Nuts)



SPB-J (B Type)



SPB-R9 (Two Nuts)



SPB-J (A Type)



SPB-RT (Threaded)



SPB-RT1 (Threaded)

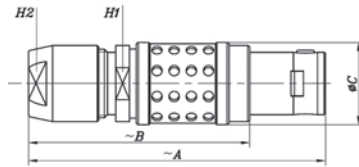


Specifications subject to change without notice.
Consult Sam Woo Electronics
for the latest specifications.

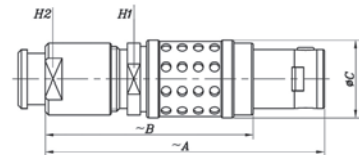
■ SPB Plug



SPB (A Type)



SPB (B Type)



Product Number						A	B	Ø C	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

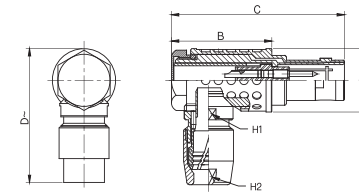
Product Number						A	B	Ø C	H1	H2
SPB	0	P	P	B		35,0	25,0	9,5	8,0	7,0
SPB	1	P	P	B		42,0	33,0	12,0	10,0	9,0
SPB	2	P	P	B		48,0	36,0	15,0	13,0	12,0
SPB	3	P	P	B		56,5	41,5	18,0	15,0	14,0

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

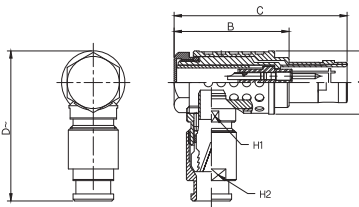
■ SPB Right-angle Plug



SPB LP (A Type)



SPB LP (B Type)



Product Number						Ø A	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

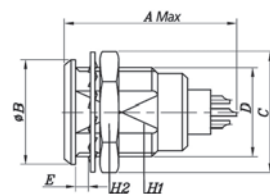
Product Number						Ø A	B	C	D	H1	H2
SPB	00	LP	P	B		Coming soon					
SPB	0	LP	P	B		10,9	19,8	29,8	25	8	7
SPB	1	LP	P	B		13,5	25	36	33	10	9
SPB	2	LP	P	B		Coming soon					
SPB	3	LP	P	B		Coming soon					

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

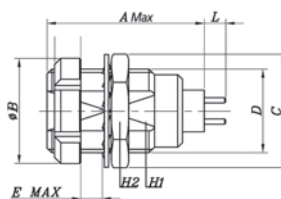
■ SPB Receptacle



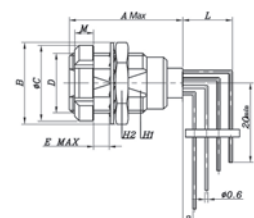
SPB (Solder Type)



SPB (Two Nut PCB)



SPB (Two Nut Right-Angle-PCB)



Product Number						A	Ø B	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	Ø B	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	Ø C	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

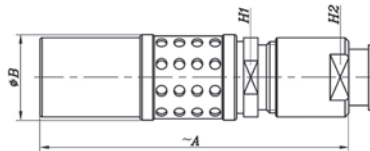
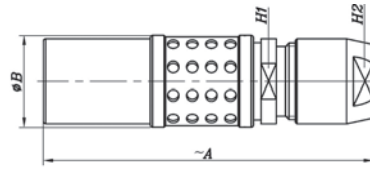
SPB Jack



SPB (A Type)



SPB (B Type)



Product Number	A	ø 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	ø 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

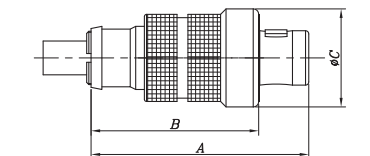
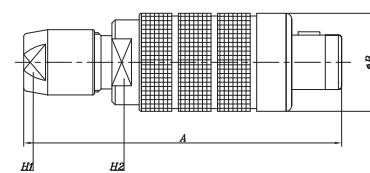
SPB Plug (Threaded-mounting)



SPB (Cable Collet, 1 Key or 2 Key)



SPB (Crimp Type, 2 key)



Product Number	A	ø 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

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

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

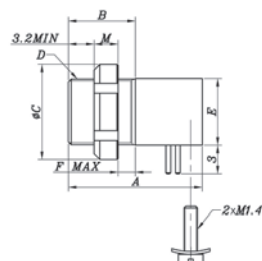
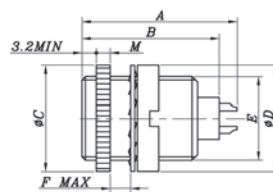
SPB Receptacle (Threaded-mounting)



SPB(1 Key)



SPB(2 Key)



Product Number	A	B	C	ø 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

Product Number	A	B	ø C	D	E	F	M
SPB-00 TH1 TH2 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.

■ Contact Code

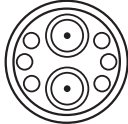
Series & Model	Size	Contact Code				Current	Contact ∅	No. of Contacts	Wire Gauge (Maximum))	Contact Arrangement	
SPB	00	250				4A	50	1-2-5-6	1,09+11,f		

Series & Model	Size	Contact				Current	Contact ∅	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

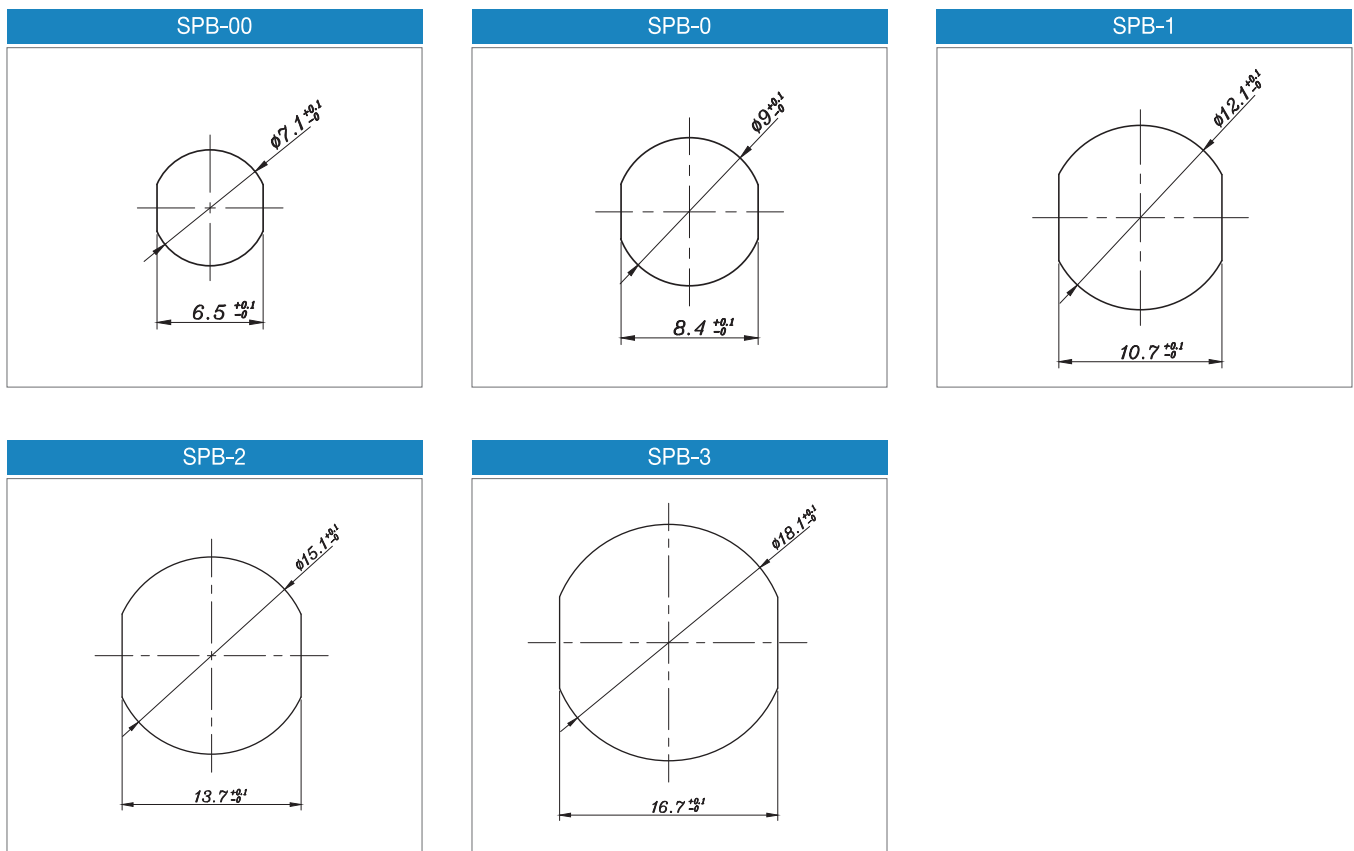
Note : Connector contact arrangement is from mating surface.

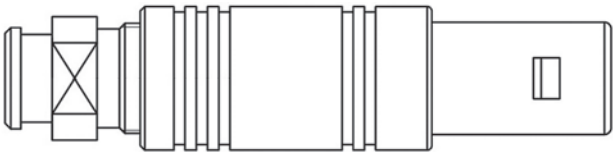
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

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		

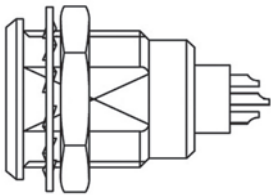
Note : Connector contact arrangement is from mating surface.

■ SPB Series Panel Layout

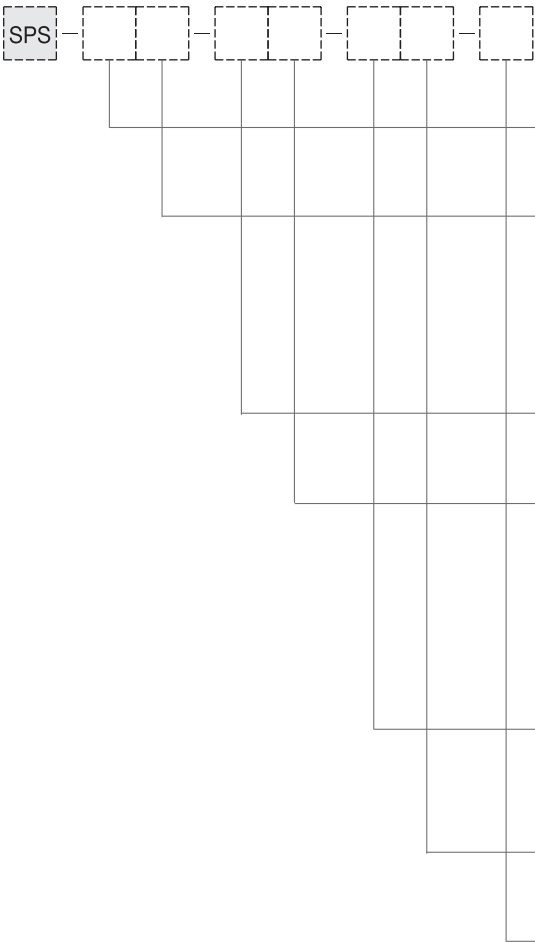




SPS Series



■ SPS Part Numbering - Hermaphroditic keying system



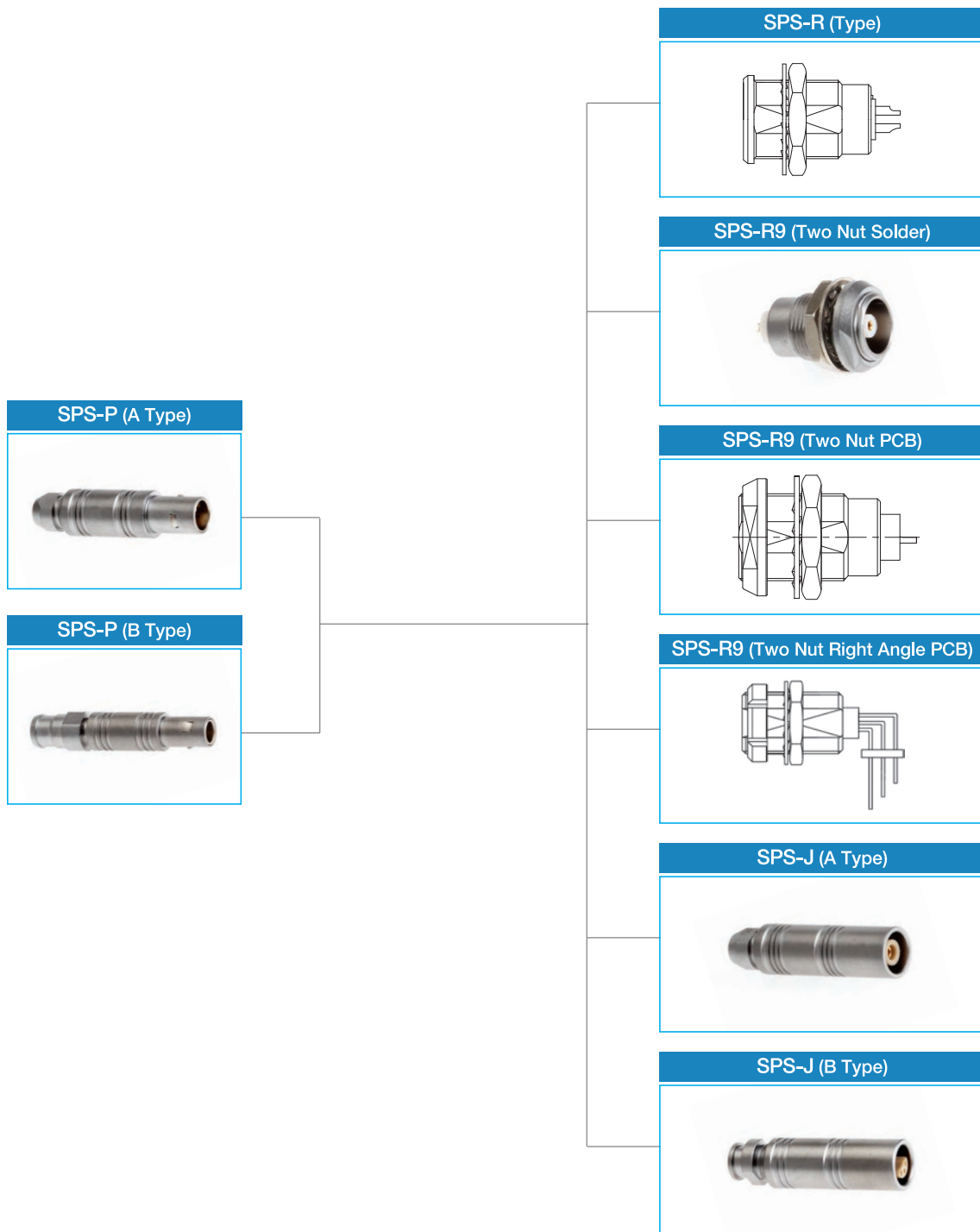
Size
00,0,1,2,3
Body Type
P : Plug J : Jack
R : Receptacle R9 : Two-Nut Receptacle
RT : Receptacle-Threaded type
LP : Plug With Right Angle Contact
Contact Code
See page 61
Contact Type
P : Male S : Female
SP : Female and Male
SPB : PCB Female and Male
LSB : Right-angle PCB Female
LSPB : Right-angle PCB Female and Male
Screw Cap Code (Plug and Jack only)
A : Screw Cap Terminated
B : Screw Cap + Boot type
Collet Code (Plug and Jack only)
See page 66
Material and Female Contact Cut Code
See page 66

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

■ Performance

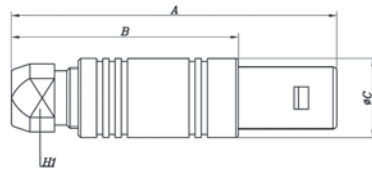
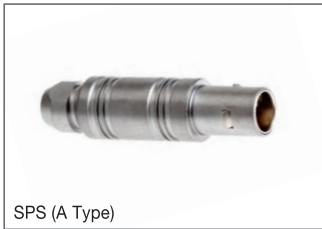
Performance	Endurance	Humidity	Temperature Range	Vibration Resistance	Shock Resistance	Corrosion Test	Mated IP Rating
Value	>5,000 cycles	95%rh 140°F	-67°F +482°F	10~2000Hz, 15g	100g, 6ms	>144h	IP50

■ Mini-map



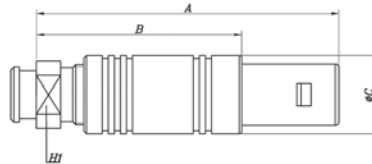
SP Series S Model Plug / Receptacle(Size & shell selection)

■ SPS Plug



Product Number						A	B	øC	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

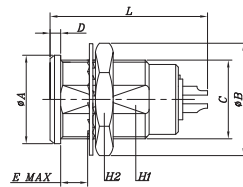
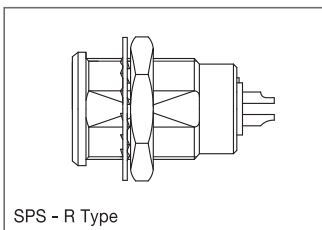
Material : Page 66
 Collet code : Page 66
 P : Male Contact SP : Female and Male Contact
 Contact code : Page 61



Product Number						A	B	øC	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

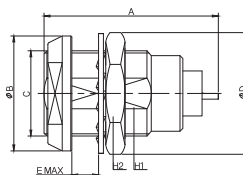
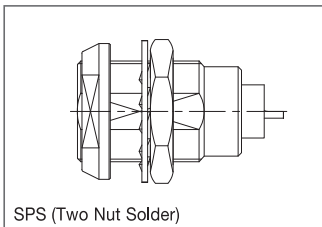
■ SPS Receptacle



Product Number						A	øB	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

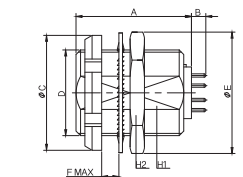
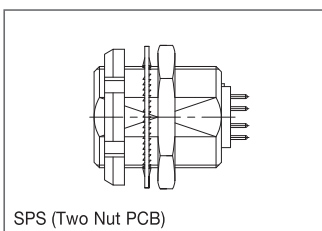
Material : Page 66
 S : Female Contact SP : Female and Male Contact
 Contact code : Page 61

1) L : Single Contact



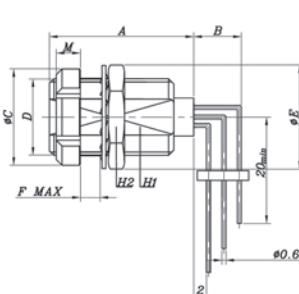
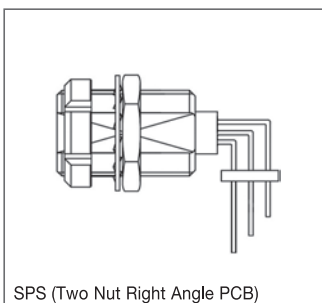
Product Number						A	øB	C	øD	E	H1	H2
SPS	0	R9				17,5	12,0	M9×0,6P	12,5	8,5	8,2	11,0
SPS	1	R9				20,2	16,0	M12×1,0P	16,0	10,0	10,5	14,0
SPS	2	R9				24,5	19,5	M15×1,0P	20,0	11,0	13,5	17,0
SPS	3	R9				29,0	24,0	M18×1,0P	25,2	14,0	16,5	22,0

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



Product Number						A	B	øC	D	øE	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



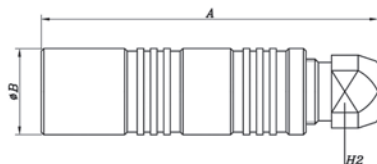
Product Number						A	B	øC	D	øE	F	H1	H2
SPS	0	R9											
SPS	1	R9											
SPS	2	R9											
SPS	3	R9											

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

Coming soon

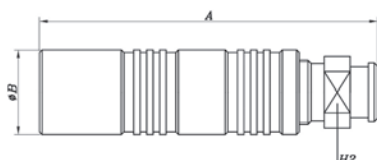
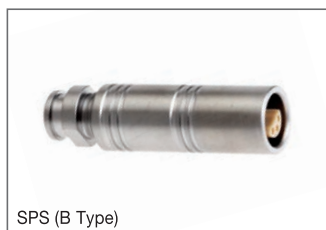
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

■ SPS Jack



Product Number										A	Ø B	H2
SPS	00	J								25,0	6,5	4,5
SPS	0	J								33,5	8,9	6,5
SPS	1	J								40,5	11,9	8,5
SPS	2	J								50,0	14,8	11,0
SPS	3	J								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								25,0	6,5	6,0
SPS	0	J								33,5	8,9	7,0
SPS	1	J								40,5	11,9	9,0
SPS	2	J								50,0	14,8	12,0
SPS	3	J								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		

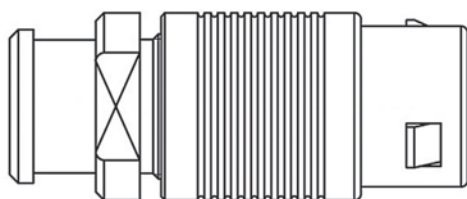
■ Contact Code (coaxial)

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	

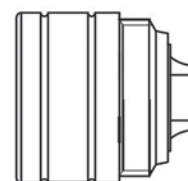
■ Contact Code (multi-contact)

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	

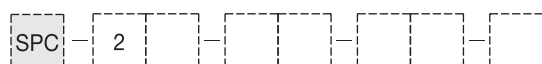
Note : Connector contact arrangement is from mating surface.



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

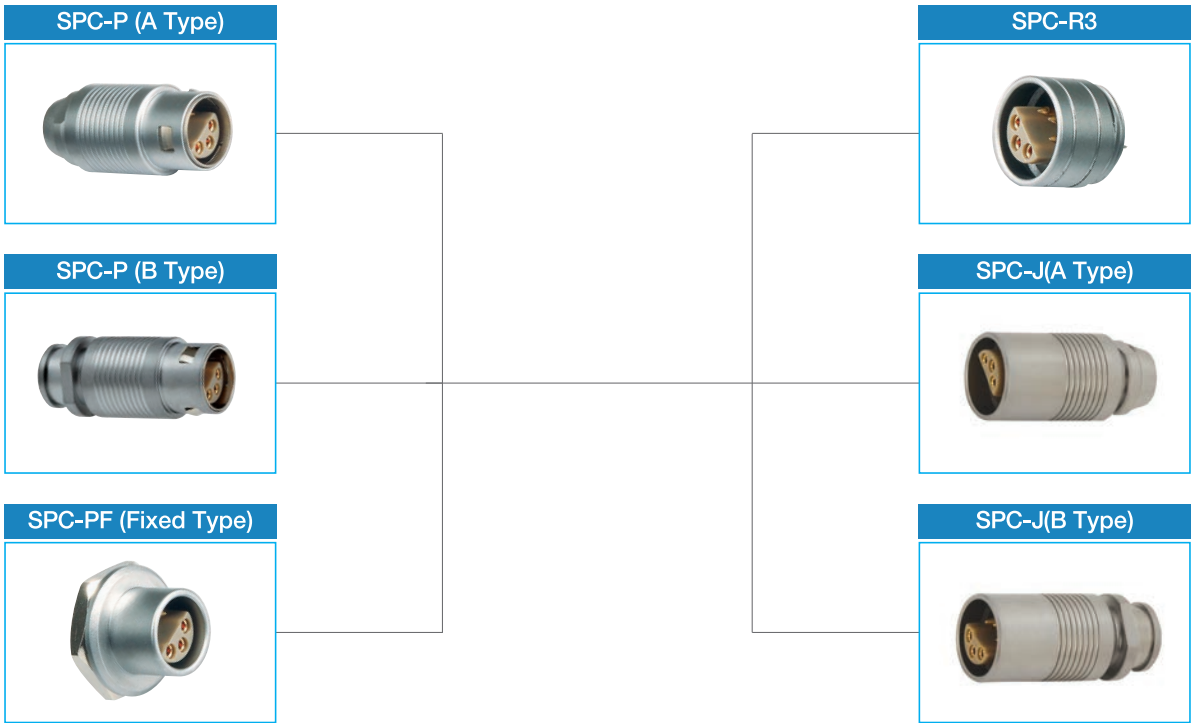
See page 66

■ 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.

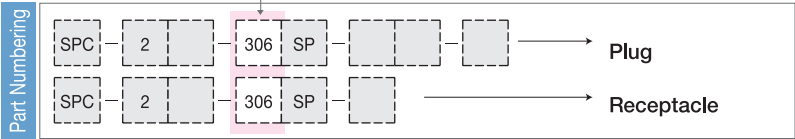
■ Mini-map



■ Contact Code

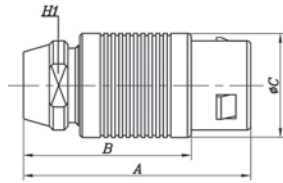
Series & Model	Size	Contact Code	Current	Contact $\varnothing$	No. of Contacts	Wire Gauge (Maximum)	Contact Arrangement
SPC	2	306	12A	1,3	6	AWG20	

Note : Connector contact arrangement is from mating surface.



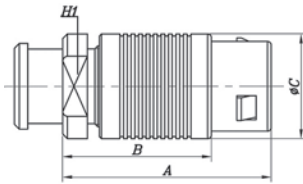
SP Series C Model Plug / Receptacle / Jack(Size & Shell Selection)

■ SPC Plug



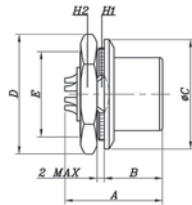
Product Number	A	B	Ø C	H1
[SPC] [2] [P] [306] [SP] [A] []	30	22	14	10,5

Material : Page 66
Collet code : Page 66



Product Number	A	B	Ø C	H1
[SPC] [2] [P] [306] [SP] [B] []	28,4	20,4	14,	12

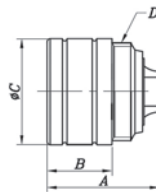
Material : Page 66
Collet code : Page 66



Product Number	A	B	Ø C	D	E	H1	H2
[SPC] [2] [PF] [306] [SP] [B] []	17	9,5	18	19,5	M15×1P	13,8	17

Material : Page 66
Collet code : Page 66

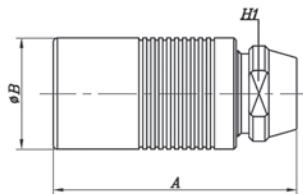
■ SPC Receptacle



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

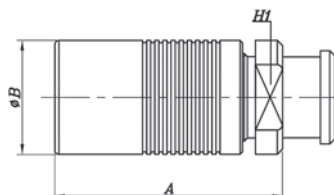
Material : Page 66

■ SPC Jack



Product Number	A	Ø B	H1
[SPC] [2] [J] [306] [SP] [A] []	28	14	1,5

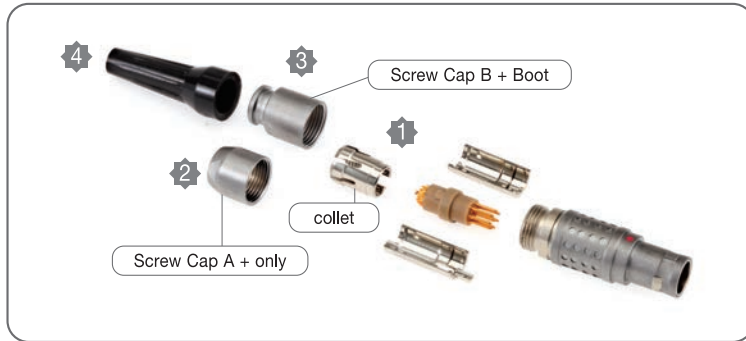
Material : Page 66
Collet code : Page 66



Product Number	A	Ø B	H1
[SPC] [2] [J] [306] [SP] [B] []	26,4	14	12

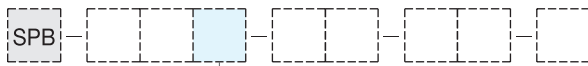
Material : Page 66
Collet code : Page 66

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



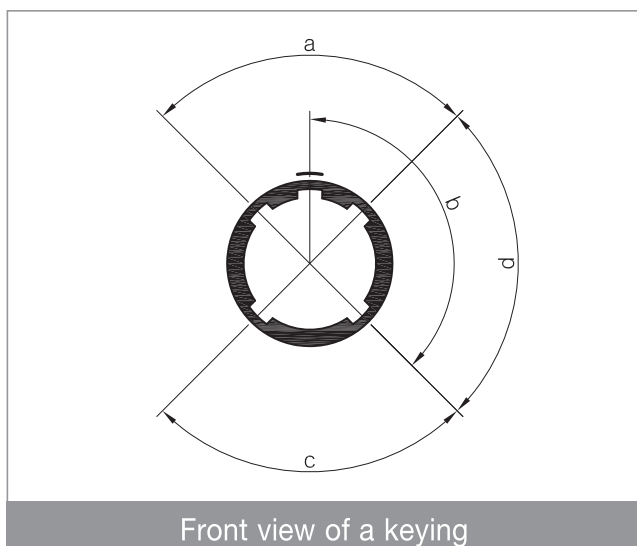
- 1) Collet
 - 2) Screw Cap A
 - 3) Screw Cap B
 - 4) Boot
- Screw Cap B + Boot

■ 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	○	○			○									○					
	0	○	○	○		○	○					○	○	○	○	○	○	○		○
	1	○	○	○		○	○			○ (SFP)		○	○	○	○	○		○		
	2	○	○	○	○	○		○	○		○		○			○			○	
	3	○	○		○	○		○	○		○		○			○			○	



SP Series Collet Code / Material Code

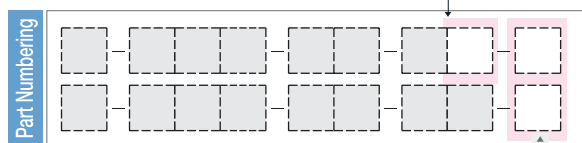
Collet Code Information

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	●	
		D35	3,5	2,8	3,4	2,9	●	
	0	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	●	●
		D72	7,2	6,7	7,0	6,1	●	●
	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	●	●
		D76	7,6	6,7	7,5	7,1	●	●
	2	M21	2,1	—	2,2	1,4	●	●
		M32	3,1	—	3,2	> 2,2	●	●
		D42	4,2	—	4,0	3,1	●	●
		D52	5,2	—	5,0	4,1	●	●
		D62	6,2	—	6,0	5,1	●	●
		D72	7,2	—	7,0	6,1	●	●
		D82	8,2	—	8,0	7,1	●	●
		D92	9,2	8,6	9,0	8,1	●	●
	3	D99	9,9	8,6	9,7	9,1	●	●
		M52	5,2	—	5,0	4,1	●	●
		D62	6,2	—	6,0	5,1	●	●
		D72	7,2	—	7,0	6,1	●	●
		D82	8,2	—	8,0	7,1	●	●
		D92	9,2	—	9,0	8,1	●	●
		D10	10,2	—	10,0	9,1	●	●
		D11	11,2	10,2	11,0	10,1	●	●
SPS	00	L29	2,9	—	2,8	2,4	●	●
		L31	3,1	—	3,0	2,6	●	●
	0	L42	4,2	—	4,1	3,7	●	●
		L44	4,4	—	4,3	3,5	●	●
SPC	2	L62	6,2	—	6,1	5,3	●	●
		L37	3,7	—	3,6	3,2	●	●
		L42	4,0	—	4,1	3,7	●	●
		L52	5,2	—	5,1	4,7	●	●
		L62	6,2	—	6,1	5,7	●	●
		L72	7,2	—	7,1	6,7	●	●
		L82	8,2	—	8,1	7,7	●	●
		L92	9,2	—	9,1	8,1	●	●

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



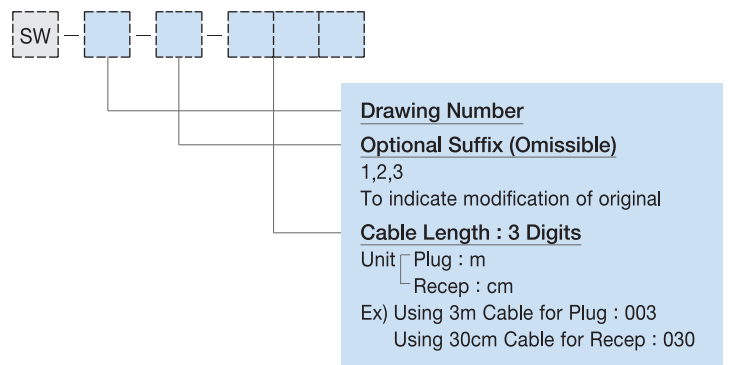
Features

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

Applications

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

■ Part Numbering



■ 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

SPP Series P Model Part Numbering



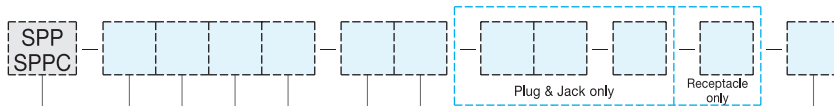
Features

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

Applications

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

■ SPP Part Numbering - Plastic



Ordering Part Number

Series

SPP : General
SPPC : Low Cost

Size

1

Body Type

P : Plug J : Jack
R : Receptacle
R9 : Two-nut Receptacle

Key Angles

Blank : 0° N : 40° B : 60° L : 80°

Body Color

G : Grey K : Black

Contact Code

See Page 71

Contact Type

P : Male S : Female
SB : PCB Female

Screw Cap Code

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

Screw Cap Color

See page 72

Collet Code

See page 72

Nut Color (Receptacle only)

See page 72

Material and Female Contact Cut Code

See page 72

Keying	0°	40°	60°	80°
	0°	40°	60°	80°
Part No.	Blank	N	B	L

Performance

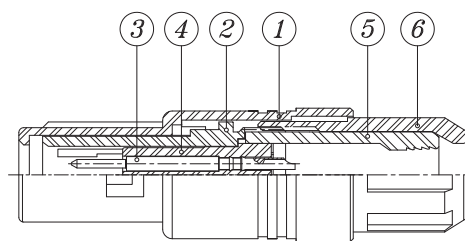
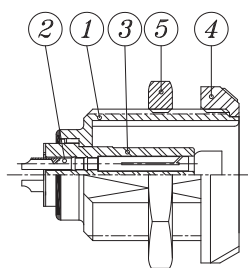
Characteristics	Value	Standards
Average retention force when pulling on the cable 1N=0,102kg	90N	IEC 60512-8 test 15f
Cable retention force (depends on cable construction) 1N=0,102kg	50 - 150N	IEC 60512-9 test 17c
Endurance (Shell)	> 1000 cycles	IEC 60512-5 test 9a
Working temperature range (PSU shell,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

Standard Model

Fixed

Receptacle

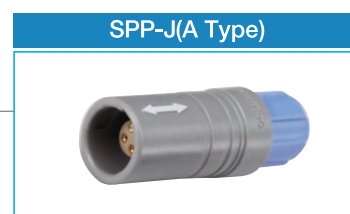
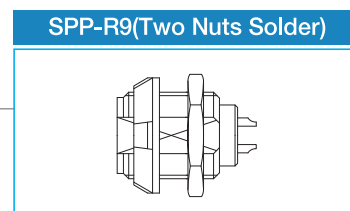
- ① Body
- ② Female contact
- ③ Insulator
- ④ Front nut
- ⑤ Nut



Straight Plug

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

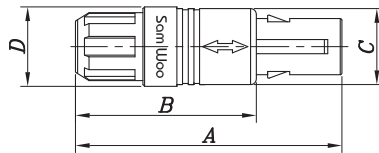
Mini-map



※ SPPC has the same mini-map.

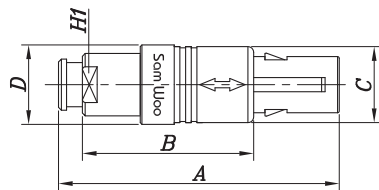
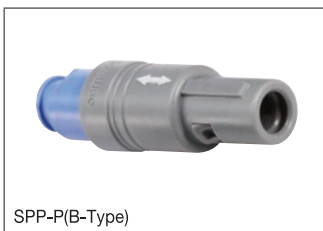
SPP Series P Model Plug / Receptacle(Size & shell selection)

SPP Plug



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

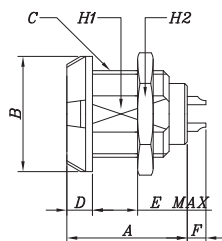
Material & Female contact Cut code : Page 72
 Collet Code : Page 72
 Screw Cap Color : Page 72
 Contact Code : Page 71
 Body Color : G(Grey) or K(Black)
 Key angles : Page 68



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

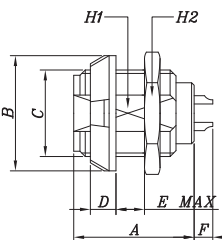
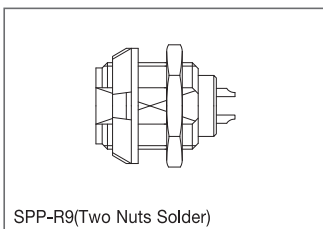
Material & Female contact Cut code : Page 72
 Collet Code : Page 72
 Screw Cap Color : Page 72
 Contact Code : Page 71
 Body Color : G(Grey) or K(Black)
 Key angles : Page 68

SPP Receptacle



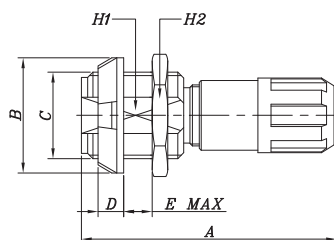
Product Number	A	B	C	D	E	F	H1	H2
[SPP] [SPPC] [1] [R] [1] [S] [] []	20,5	18,5	M14×1,0P	4,0	9,0	2,5	12,5	17,0

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



Product Number	A	B	C	D	E	F	H1	H2
[SPP] [SPPC] [1] [R9] [1] [S] [] []	20,5	18,5	M14×1,0P	4	9	2,5	12,5	17

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

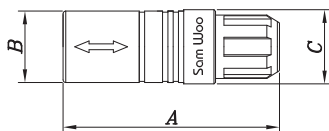


Product Number	A	B	C	D	E	H1	H2
[SPP] [SPPC] [1] [R9] [1] [S] [] []	40,0	18,5	M14×1,0P	4,0	9,0	12,5	17,0

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

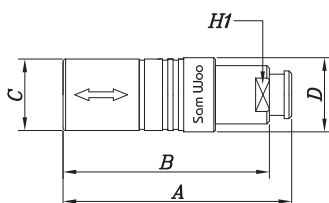
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SPP Jack



Product Number	A	ø B	ø C
SPP-SPPC-1-1-J-1-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	ø C	ø D	H1
SPP-SPPC-1-1-J-1-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 ø	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	

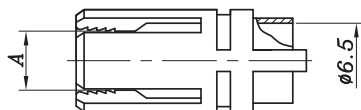
Note : Connector contact arrangement is from solder pot.

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 $\varnothing$	
				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

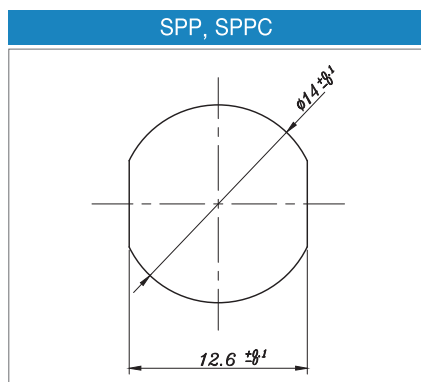
Material Code Instruction

Plug + Male Contact : Code 1, 2, 4

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

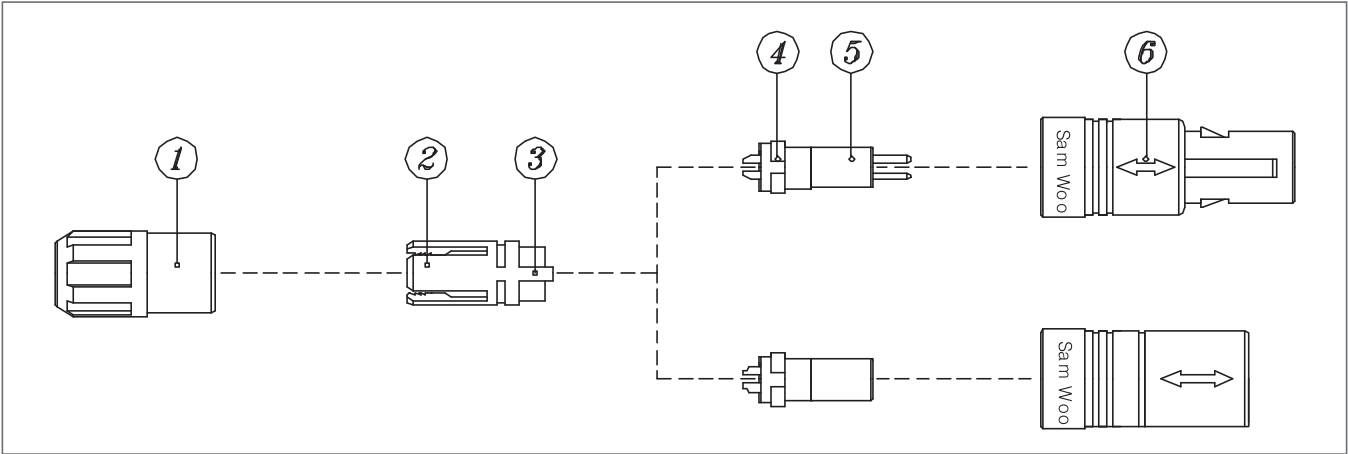
Jack + Female Contact : Code 1, 2, 3, 4

■ SPP, SPPC Series Panel Layout



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

Solder contacts

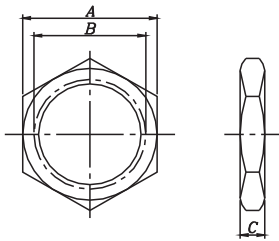


1.
- Diagram 1 shows a cable with dimensions A and B. Dimension A is the length of the cable, and dimension B is the length of the conductors.
2.
- Diagram 2 shows the cable with the screw cap (1) and the collet (2) attached to the end.
3.
- Diagram 3 shows the cable with the screw cap (1), the collet (2), and the tag (3) attached. The tag (3) is shown being soldered into the contact.
4.
- Diagram 4 shows the cable with the screw cap (1), the collet (2), the tag (3), and the conductors (4) and (5) soldered into the contacts. Red arrows indicate the direction of the conductors.
5.
- Diagram 5 shows the cable with the screw cap (1), the collet (2), the tag (3), and the conductors (4) and (5) soldered into the contacts. The assembly is shown being pushed into the p) body (6).
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. Slide the screw cap ① and then the collet ② onto the cable.
3. Solder conductors into contacts, making sure that neither solder nor flux gets onto the insulator or cable insulation.
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. 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

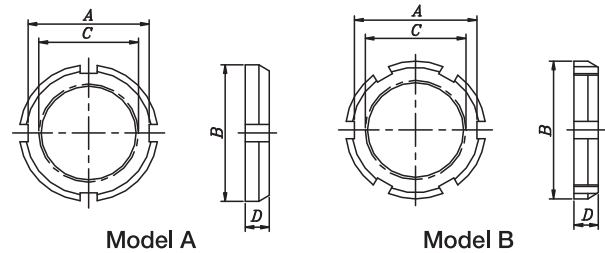
■ Hexagonal Nut



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

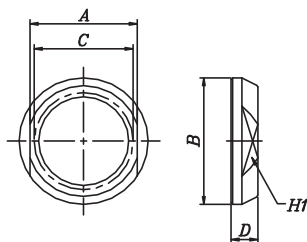
►Optional Nut



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

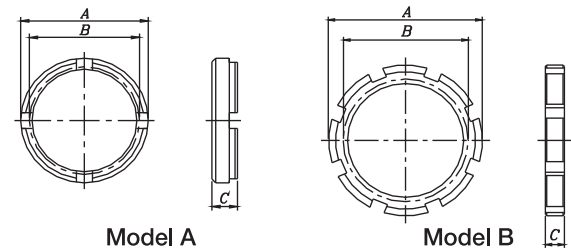
►Optional Nut



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.

SPA [] [] ([])

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 ϕ A 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
		ϕ A	L	max	min	
SPA-0B-BK25	0	2,5	24	2,9	2,5	Black
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	Grey
SPA-1B-BK30		3,0	30	3,4	3,0	
SPA-1B-BK35		3,5	30	3,9	3,5	
SPA-1B-BK40		4,0	30	4,4	4,0	
SPA-1B-BK45		4,5	30	4,9	4,5	
SPA-1B-BK54		5,4	30	6,0	5,4	
SPA-1B-BK65	2	6,5	30	7,0	6,5	White
SPA-2B-BK40		4,0	36	4,5	4,0	
SPA-2B-BK45		4,5	36	5,0	4,5	
SPA-2B-BK50		5,0	36	5,5	5,0	
SPA-2B-BK60		6,0	36	6,5	6,0	
SPA-2B-BK70		7,0	36	7,7	7,0	
SPA-2B-BK78	3	7,8	36	8,8	7,8	Red
SPA-3B-BK70		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℃ ~ +200℃
Polyurethane	-40℃ ~ +80℃

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



■ Part Numbering

■ Plug Cable Assembly



■ Receptacle Cable Assembly

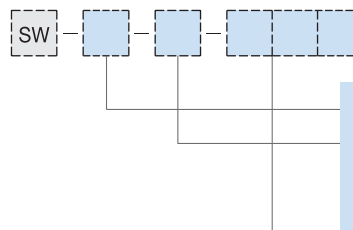


Features

- 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

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