

Medical self-locking plastic connectors

— keying system

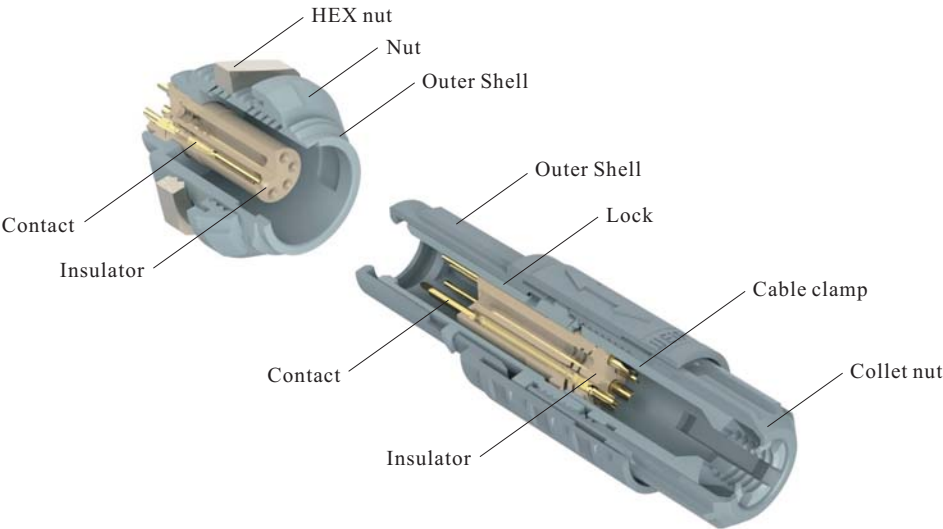
P
Series

01

IP50



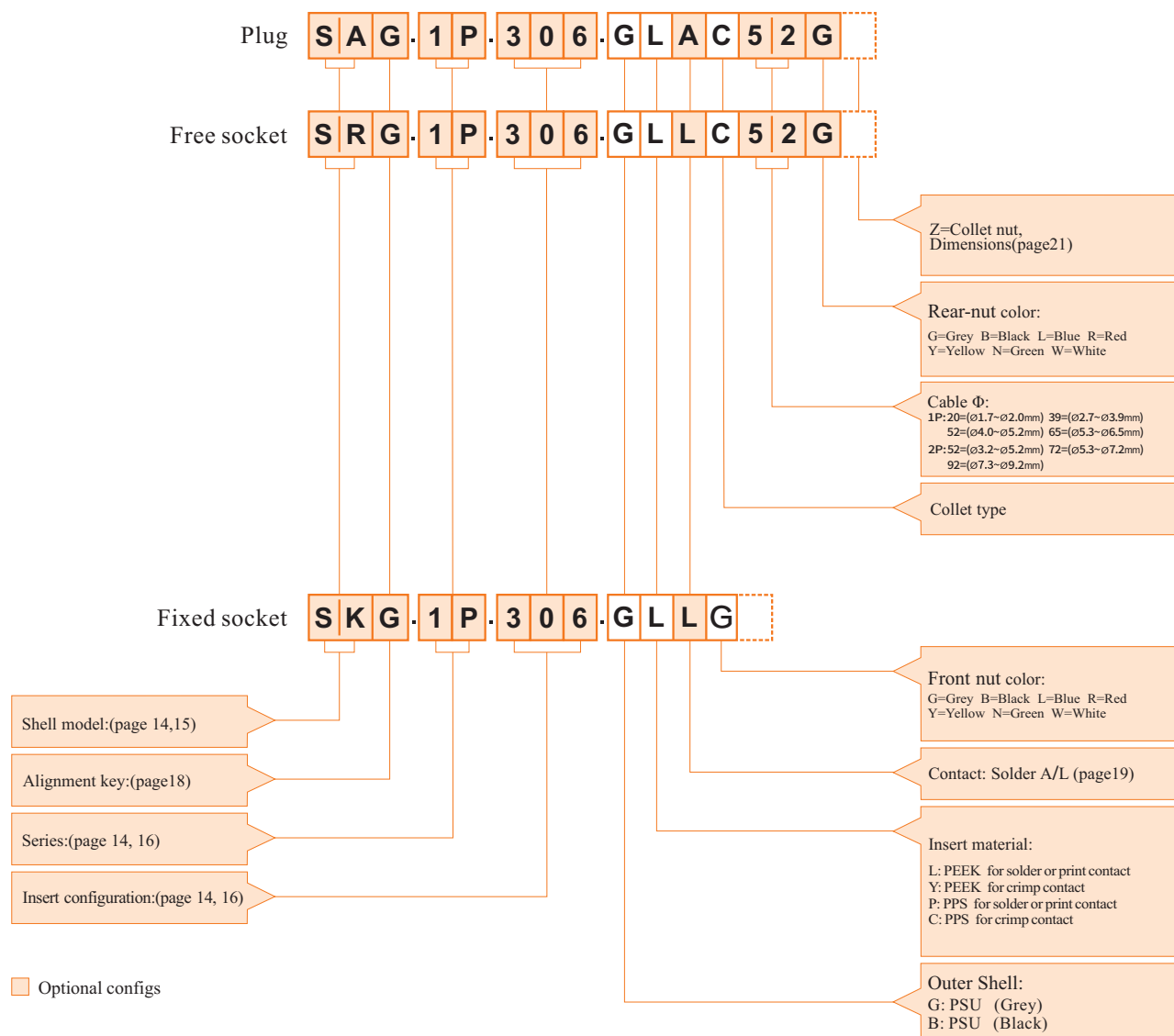
Part Section Showing Internal Components



Material and spec

Specifications	P Series connector	
Coupling	Push-pull self-latching connector	
Shell	PSU	
Insert material	PEEK	PPS
Contact material	Brass with gold plating	
IP rating	IP50 (mated)	
Mating cycle	>1000	
Temperature range	-50℃~+150℃	
Insulation impedance	≥100MΩ	
Collet cut	PSU	

Part Numbering System

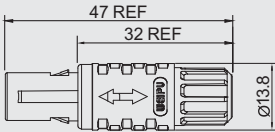


SAG.1P.306.GLAC52G = straight plug with key (G), 1P series, multipole type with 6 contacts, grey PSU outershell, PEEK insulator, male solder contacts, C type collet for 4.0mm-5.2mm diameter cable, and grey PSU Rear-nut.

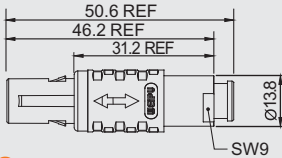
SKG.1P.306.GLLG = Free socket with cable collet and alignment key (G), 1P series, multipole type with 6 contacts, grey PSU outershell, PEEK insulator, female solder contacts, and grey PSU front nut.

1P Series Insert configuration

Male solder contacts		Female solder contacts		Male crimp contacts		Female crimp contacts							
													
Insert configuration		Reference	Contact		Contact type				Test voltage (kV rms)				Rated current (A)
Plug	Fixed socket		Number of contact	Cable (mm)	Solder	Crimp	Print	Print (elbow)	Solder		Crimp		
									Contact ↑ Contact	Contact ↑ Housing	Contact ↑ Contact	Contact ↑ Housing	
		302	2	1.3	●	●	●	●	1.2	/	1.2	/	10.0
		304	4	0.9	●	●	●	●	1.2	/	1.2	/	8.0
		305	5	0.9	●	●	●	●	1.05	/	1.05	/	7.0
		306	6	0.7	●	●	●	●	1.05	/	1.05	/	6.0
		307	7	0.7	●	●	●	●	1.05	/	1.05	/	5.0
		308	8	0.7	●	●	●	●	0.95	/	1.05	/	5.0
		309	9	0.5	●	●	●	●	0.85	/	0.85	/	3.0
		310	10	0.5	●	●	●	●	0.85	/	0.85	/	3.0
		314	14	0.5	●	●	●	●	0.6	/	0.6	/	2.0

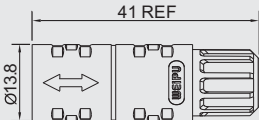


SAG
Straight plug, key(G), cable collet

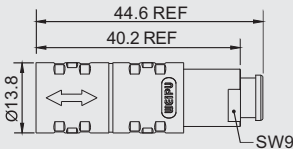


SAG
Straight plug, key(G), cable collet and nut for fitting a bend relief

Note: The bend relief must be ordered separately(page21)



SRG
Fixed socket, key(G), cable collet

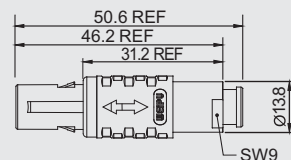


SRG
Free socket, key(G), cable collet and nut for fitting a bend relief

Note: The bend relief must be ordered separately(page21)

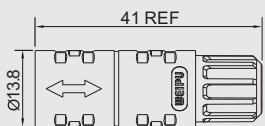
SAG

Straight plug, key(G), cable collet

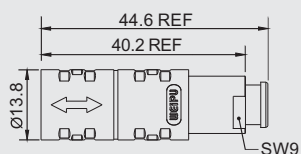
**SAG**

Straight plug, key(G), cable collet and nut for fitting a bend relief

Note: The bend relief must be ordered separately(page21)

**SRG**

Fixed socket, key(G), cable collet

**SRG**

Free socket, key(G), cable collet and nut for fitting a bend relief

Note: The bend relief must be ordered separately(page21)

● Regular model, preferred

● In development

★ Compatible only with WEIPU Connectors

Calculation Standard: Working Voltage = Test Voltage / 3

Note: The maximum admissible operating voltage depends upon the national or international standards in force for the application in question. Air and creepage distances impact the operating voltage.



1P Series Insert configuration

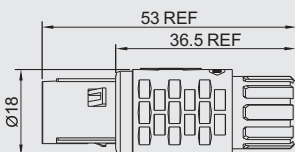
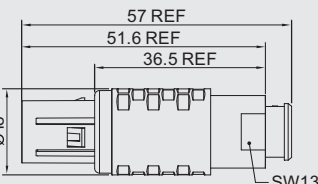
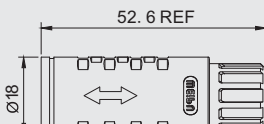
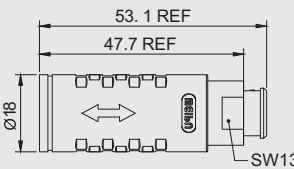
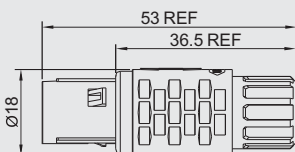
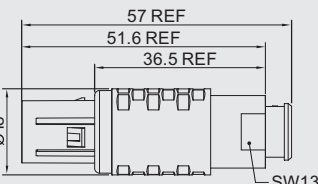
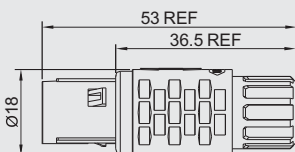
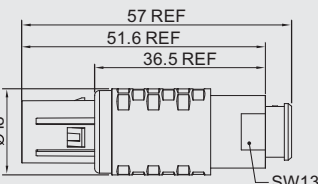
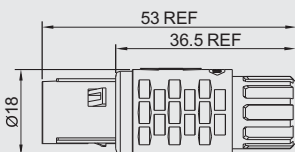
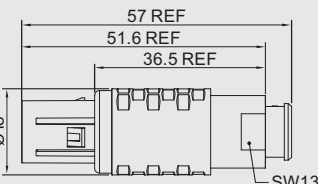
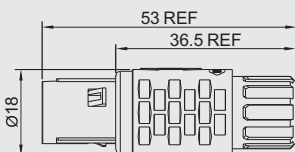
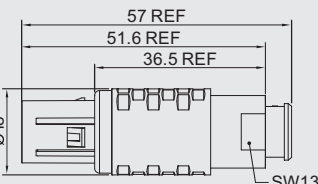
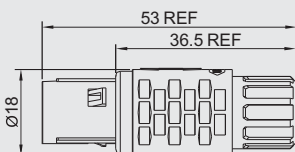
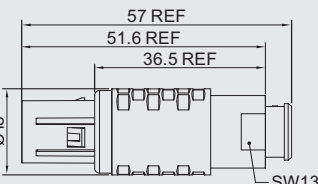
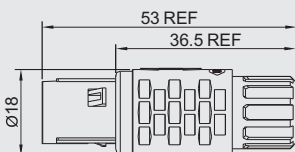
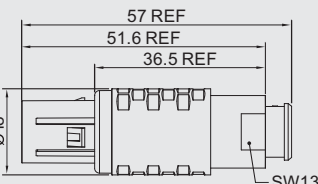
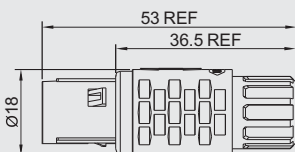
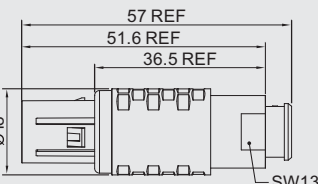
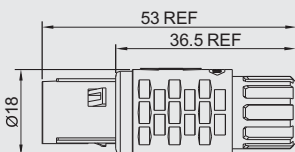
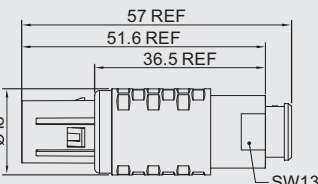
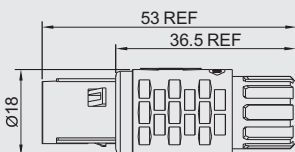
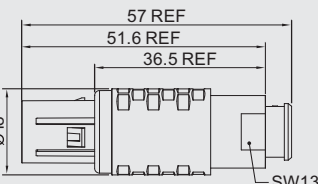
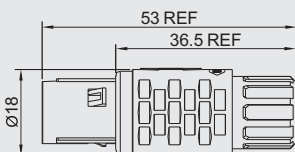
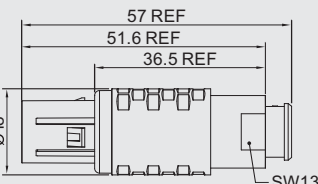
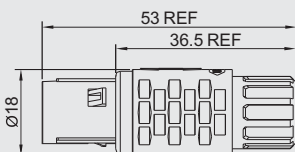
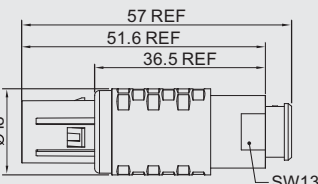
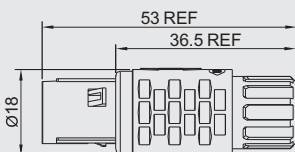
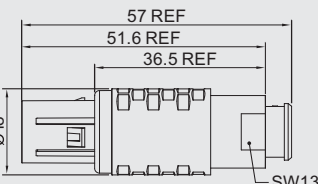
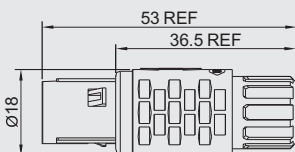
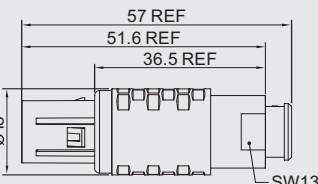
Male solder contacts		Female solder contacts		Insert configuration		Reference	Contact		Contact type				Test voltage (kV rms)				Rated current (A)
Male crimp contacts		Female crimp contacts															
Plug	Fixed socket	Number of contact	Cable (mm)	Solder	Crimp		Print	Print (elbow)	Solder		Crimp						
								Contact ↑ Contact	Contact ↑ Housing	Contact ↑ Contact	Contact ↑ Housing						
				302	2	1.3							1.2	/	1.2	/	10.0
				304	4	0.9							1.2	/	1.2	/	8.0
				305	5	0.9							1.05	/	1.05	/	7.0
				306	6	0.7							1.05	/	1.05	/	6.0
				307	7	0.7							1.05	/	1.05	/	5.0
				308	8	0.7							0.95	/	1.05	/	5.0
				309	9	0.5							0.85	/	0.85	/	3.0
				310	10	0.5							0.85	/	0.85	/	3.0
				314	14	0.5							0.6	/	0.6	/	2.0

- Regular model, preferred
- In development
- ★ Compatible only with WEIPU Connectors

Calculation Standard: Working Voltage = Test Voltage / 3

Note: The maximum admissible operating voltage depends upon the national or international standards in force for the application in question. Air and creepage distances impact the operating voltage.

2P Series Insert configuration

Male solder contacts		Female solder contacts		Insert configuration		Contact		Contact type				Test voltage (kV rms)				Rated current (A)
Male crimp contacts		Female crimp contacts														
Plug	Fixed socket	Reference	Number of contact	Cable (mm)	Solder	Crimp	Print	Print (elbow)	Solder		Crimp					
									Contact ↑ Contact	Contact ↑ Housing	Contact ↑ Contact	Contact ↑ Housing				
																
																
		302	2	2.0	●	●	●	●	2.10	/	2.10	/	25.0			
		303	3	1.6	●	●	●	●	2.40	/	2.40	/	17.0			
		304	4	1.3	●	●	●	●	1.85	/	1.85	/	15.0			
		305	5	1.3	●	●	●	●	1.75	/	1.75	/	14.0			
		306	6	1.3	●	●	●	●	1.35	/	1.35	/	12.0			
		307	7	1.3	●	●	●	●	1.75	/	1.75	/	11.0			
		308	8	0.9	●	●	●	●	1.50	/	1.50	/	10.0			
		310	10	0.9	●	●	●	●	1.45	/	1.45	/	8.0			
		312	12	0.7	●	●	●	●	1.25	/	1.25	/	7.0			
		316	16	0.7	●	●	●	●	0.95	/	1.50	/	6.0			
		319	19	0.7	●	●	●	●	0.95	/	1.40	/	5.0			
		326	26	0.5	●	●	●	●	0.95	/	1.00	/	2.0			
		332	32	0.5	●	●	●	●	0.7	/	0.7	/	1.5			

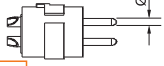
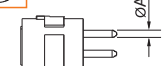
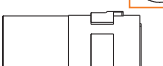
- Regular model, preferred
- In development

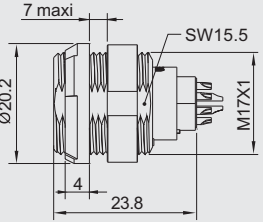
Calculation Standard: Working Voltage = Test Voltage / 3

Note: The maximum admissible operating voltage depends upon the national or international standards in force for the application in question. Air and creepage distances impact the operating voltage.



2P Series Insert configuration

Male solder contacts		Female solder contacts		Insert configuration		Reference	Contact		Contact type				Test voltage (kV rms)				Rated current (A)
Male crimp contacts		Female crimp contacts					Plug	Fixed socket	Number of contact	Cable (mm)	Solder	Crimp	Print	Print (elbow)	Solder		
				Contact ↑ Contact	Contact ↑ Housing	Contact ↑ Contact									Contact ↑ Housing		
																	
																	

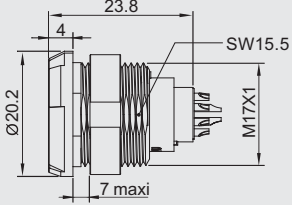


7 maxi
Ø20.2
4
23.8
SW15.5
M17X1

→ SKB

Fixed socket with two nuts, key(B)

Note: Panel cut-out,nut fixing torque,(page21)



23.8
4
Ø20.2
7 maxi
SW15.5
M17X1

→ SLB

Fixed socket with two nuts, key(B)

Note: Panel cut-out,nut fixing torque,(page21)

		302	2	2.0	●	●	●	●	2.10	/	2.10	/	25.0
		303	3	1.6	●	●	●	●	2.40	/	2.40	/	17.0
		304	4	1.3	●	●	●	●	1.85	/	1.85	/	15.0
		305	5	1.3	●	●	●	●	1.75	/	1.75	/	14.0
		306	6	1.3	●	●	●	●	1.35	/	1.35	/	12.0
		307	7	1.3	●	●	●	●	1.75	/	1.75	/	11.0
		308	8	0.9	●	●	●	●	1.50	/	1.50	/	10.0
		310	10	0.9	●	●	●	●	1.45	/	1.45	/	8.0
		312	12	0.7	●	●	●	●	1.25	/	1.25	/	7.0
		316	16	0.7	●	●	●	●	0.95	/	1.50	/	6.0
		319	19	0.7	●	●	●	●	0.95	/	1.40	/	5.0
		326	26	0.5	●	●	●	●	0.95	/	1.00	/	2.0
		332	32	0.5	●	●	●	●	0.7	/	0.7	/	1.5

- Regular model, preferred
- In development

Calculation Standard: Working Voltage = Test Voltage / 3

Note: The maximum admissible operating voltage depends upon the national or international standards in force for the application in question. Air and creepage distances impact the operating voltage.

Alignment key (B Series)

			1	B				C	L					
--	--	--	---	---	--	--	--	---	---	--	--	--	--	--

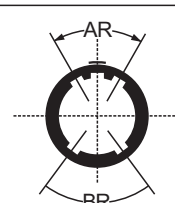
Front view of a socket

Ref.	Nb of keys	Series					Contact type		Note
		Angles	1B	Angles	2B	3B	Plug	Socket	
G	1	–	0°	–	0°	0°	Male	Female	●
A	2	AR	30°	AR	30°	30°	Male	Female	●
B	2		60°		45°	45°	Male	Female	●
C	2		90°		60°	60°	Male	Female	●
D	2	BR	135°	CR	95°	95°	Male	Female	○
E	2		145°	BR	120°	120°	Male	Female	○
F	2		155°		145°	145°	Male	Female	○
J	2	CR	45°	AR	37.5°	37.5°	Female	Male	●
K	2		70°		52.5°	52.5°	Female	Male	○
L	2		80°	CR	70°	70°	Female	Male	○
M	2	DR	–	–	–	–	Female	Male	○
Y	3	–	–	BR	112.5°	126°	Male	Female	●
		–	–	CR	100°	102°			

- Regular model, preferred
- Special order alternative

Alignment key (W Series)

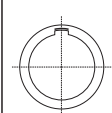
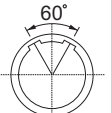
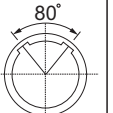
			3	W				G	L					
--	--	--	---	---	--	--	--	---	---	--	--	--	--	--

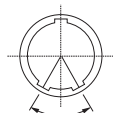
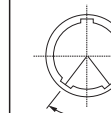
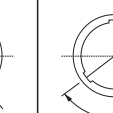
	Ref.	Nb of keys	Angles	Series	Contact type		Note
				3W	Plug	Socket	
 Front view of a socket	G	1	–	0°	Male	Female	●
	A	2	AR	30°	Male	Female	●
	B	2		45°	Male	Female	●
	L	2	BR	75°	Female	Male	○

- Regular model, preferred
- Special order alternative

Alignment key (P Series)

			1	P				G	L					
--	--	--	---	---	--	--	--	---	---	--	--	--	--	--

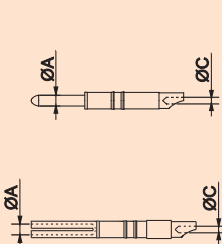
Ref.(1P)	G	A	B	C
Front view of a socket				
Nb of keys	1	2	2	2

Ref.(2P)	B	C	D
Front view of a socket			
Nb of keys	3	3	3

- Regular model, preferred
- Special order alternative

Contacts reference for B&W series plugs, free or fixed sockets

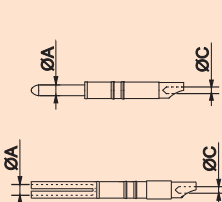


Contact type	Reference		Contact			Conductor						F _r (N)
	Male	Female	ØA (mm)	ØC (mm)	Form per fig.	Solid		Stranded				
						AWG max.	Section max. (mm ²)	AWG		Section(mm ²)		
								min.	max.	min.	max.	
	A	L	0.5	0.40	–	28	0.09	–	30	–	0.05	–
			0.5	0.45	–	28	0.09	–	28	–	0.09	–
			0.7	0.80	–	22	0.34	–	22 ¹⁾	–	0.34	–
			0.9	0.80	–	22	0.34	–	22 ¹⁾	–	0.34	–
			1.3	1.00	–	20	0.50	–	20 ¹⁾	–	0.50	–
			1.6	1.40	–	16	1.00	–	18	–	1.00	–
			2.0	1.80	–	14	1.50	–	16	–	1.50	–
			3.0	2.70	–	10	4.00	–	12	–	4.00	–

Note: ¹⁾for a given AWG, the diameter of some stranded conductor designs is larger than the solder cup diameter.
Make sure that the maximum conductor diameter is smaller than $\varnothing C$.

Contacts reference for 2P series plugs, free or fixed sockets



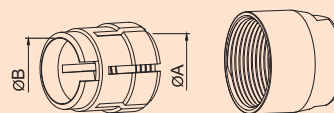
Contact type	Reference		Contact			Conductor						F _r (N)
	Male	Female	ØA (mm)	ØC (mm)	Form per frg.	Solid		Stranded				
						AWG max.	Section max. (mm ²)	AWG		Secrion(mm ²)		
								min.	max.	min.	max.	
	A	L	0.5	0.45	–	28	0.09	–	28	–	0.09	–
			0.7	0.85	–	22	0.34	–	22 ¹⁾	–	0.34	–
			0.9	0.85	–	22	0.34	–	22 ¹⁾	–	0.34	–
			1.3	1.40	–	20	0.50	–	20 ¹⁾	–	0.50	–
			1.6	1.40	–	16	1.00	–	18	–	1.00	–
			2.0	1.80	–	14	1.50	–	16	–	1.50	–

Note: ¹⁾for a given AWG, the diameter of some stranded conductor designs is larger than the solder cup diameter.
Make sure that the maximum conductor diameter is smaller than $\varnothing C$.

Collets (B series)



D type collets for B series



Reference		Collet Ø		Cable Ø		注 Notes
Type	Code	ØA	ØB	max.	min.	
1B	D 42	4.2	—	4.2	3.1	
	D 52	5.2	—	5.2	> 4.2	
	D 62	6.2	—	6.2	> 5.2	
	D 72	7.2	6.2	7.2	> 6.2	
	D 76	7.6	6.9	7.6	> 7.2	1)
2B	D 42	4.2	—	4.2	> 3.2	
	D 52	5.2	—	5.2	> 4.2	
	D 62	6.2	—	6.2	> 5.2	
	D 72	7.2	—	7.2	> 6.2	
	D 82	8.2	—	8.2	> 7.2	
	D 92	9.2	8.6	9.2	> 8.2	
	D 99	9.9	8.6	9.9	> 9.2	1)
3B	D 62	6.2	—	6.2	4.9	
	D 72	7.2	—	7.7	> 6.2	
	D 92	9.2	—	9.2	> 7.7	
	D 10	10.2	—	10.0	> 9.2	
	D 11	11.0	—	11.0	> 10.1	
	D 12	12.0	10.2	11.9	10.8	1)

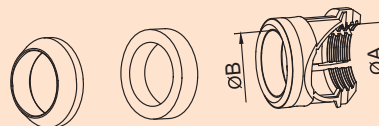
Note: all dimensions are in millimetres.

¹⁾ these collets cannot be used for connector models with nut for fitting a bend relief. No bend relief available for this cable size.

Collets (W series)

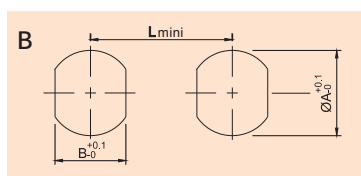


C type collets for W series



Reference		Collet Ø		Cable Ø		Notes
Type	Code	ØA	ØB	max.	min.	
3W	C 30	3.2	—	3.0	2.6	
	C 35	4.2	—	3.5	3.1	
	C 40	4.2	—	4.0	3.6	
	C 45	5.2	—	4.5	4.1	
	C 50	5.2	—	5.0	4.6	
	C 55	6.2	—	5.5	5.1	
	C 60	6.2	—	6.0	5.6	
	C 65	7.2	—	6.5	6.1	
	C 70	7.2	—	7.0	6.6	
	C 75	8.2	—	7.5	7.1	
	C 80	8.2	—	8.0	7.6	
	C 85	9.2	—	8.5	8.1	
	C 90	9.2	—	9.0	8.6	
	C 95	10.2	10.2	9.5	9.1	
	C 10	10.2	10.2	10.0	9.6	
	C 11	10.6	10.6	10.5	10.1	

Panel cut-outs



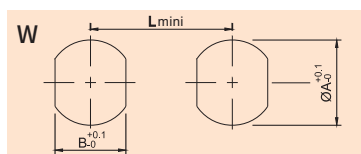
B series

Series	ØA	B	L
1B	12.1	10.6	18.5
2B	15.1	13.6	22.5
3B	18.2	16.6	27.0

Mounting nut torque

Series	Torque(Nm)	
	Metal shell	Plastic shell
1B	4.5	0.7
2B	6.0	0.8
3B	9.0	1.0

1N=0.102kg



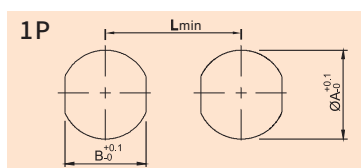
W series

Series	ØA	B	L
3W	20.2	18.6	30.0

Mounting nut torque

Series	Torque(Nm)
3W	9

1N=0.102kg



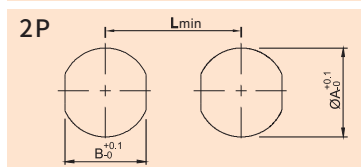
P series

Series	ØA	B	L
1P	14	12.6	23.5
2P	17.1	15.6	26

Mounting nut torque

Series	Torque(Nm)
1P	1.5
2P	0.8

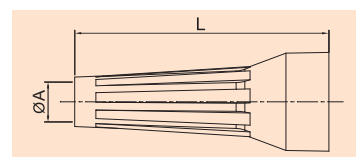
1N=0.102kg



SRA Bend relief (TPU)



Number	Colour	Number	Colour	Number	Colour
L	blue	Y	yellow	R	red
W	white	M	brown	S	orange
G	grey	B	black	N	green



Part number	Series	Bend relief		Cable Ø		Material	Temperature range
		A	L	min.	max.		
SRA.1B.025.DG	1B 1P	2.5	30	2.5	2.9	TPU Thermoplastic Polyurethane	-40°C~80°C
SRA.1B.030.DG		3.0	30	3.0	3.4		
SRA.1B.035.DG		3.5	30	3.5	3.9		
SRA.1B.040.DG		4.0	30	4.0	4.4		
SRA.1B.045.DG		4.5	30	4.5	4.9		
SRA.1B.054.DG		5.4	30	5.4	6.0		
SRA.1B.065.DG		6.5	30	6.5	7.0		
SRA.2B.040.DG	2B 2P	4.0	36	4.0	4.5		
SRA.2B.045.DG		4.5	36	4.5	5.0		
SRA.2B.050.DG		5.0	36	5.0	5.5		
SRA.2B.060.DG		6.0	36	6.0	6.5		
SRA.2B.070.DG		7.0	36	7.0	7.7		
SRA.2B.080.DG		7.8	36	7.8	8.8		
SRA.3B.050.DG	3B 3W	4.5	42	4.5	5.2		
SRA.3B.060.DG		6.0	42	6.0	6.9		
SRA.3B.070.DG		7.0	42	7.0	7.9		
SRA.3B.080.DG		8.0	42	8.0	8.9		
SRA.3B.090.DG		9.0	42	9.0	10.0		

Push-pull self-latching connector

