

PRECISION PUSH-PULL SELF-LATCHING CONNECTOR

Push-Pull self-latching system



Connect to put the new realm of technique

WEIPU was established in 1996, specialize in R&D and manufacturing the industrial connectors, we are the member of “National Electrical Appliances Standardization Technical Committees” and one of the members to draft the national standard for industrial connectors GB/T11918.



Factory premises

Workshop building



ISO 9001

ISO/TS 22163

IATF16949

B Series Connector

Standard of the Push-Pull self-latching system

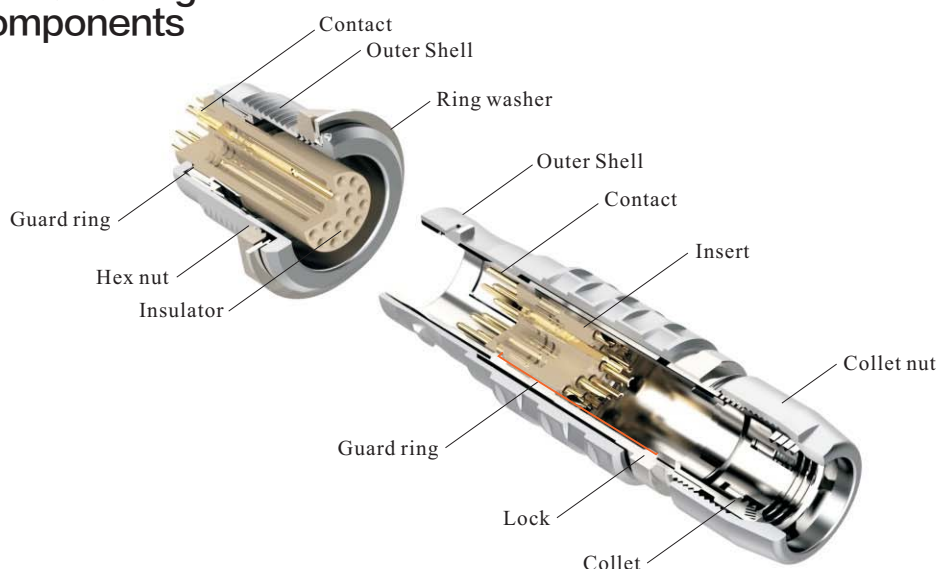
—keying system

Technical Parameter:

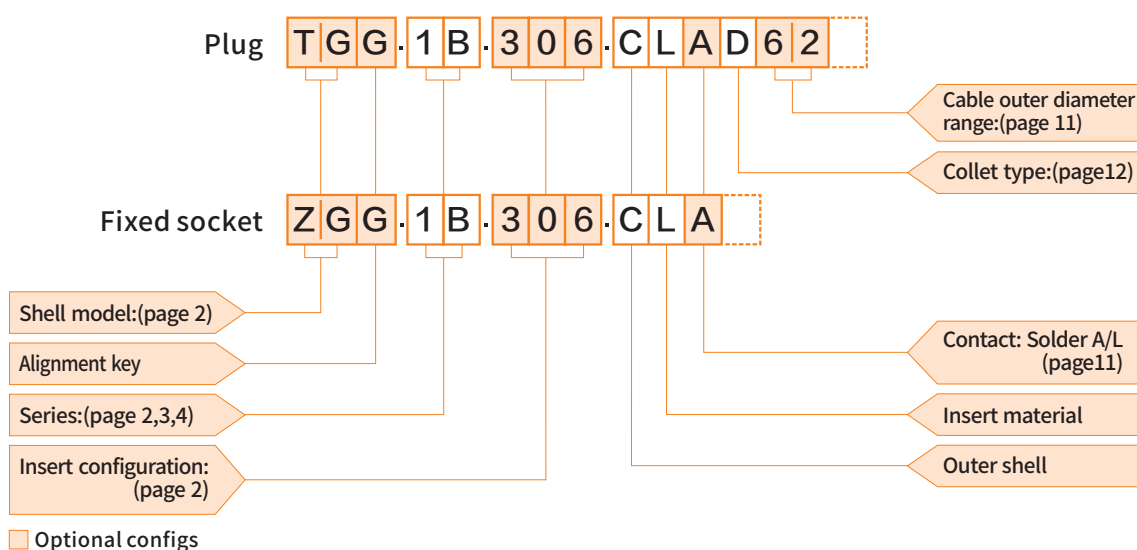
Temperature range: -55°C~+200°C
Mating cycle: >5000
Insert material: PEEK
Insulator: Brass with gold plating
Shell material: outer shell in chrome-plated brass
Insulation resistance: $\geq 100M\Omega$
IP rating: IP50
Shielding efficiency: at 10MHz >75dB/at 1GHz >40dB
Salt spray test: 144hrs



Part Section Showing Internal Components



Part Numbering System



TGG.1B.306.CLAD62 = straight plug with key (G) and cable collet, 1B series, multipole type with 6 contacts, outer shell in chrome-plated brass, PEEK insulator, male solder contacts, D type collet for 5.2mm-6.2mm diameter cable.

ZGG.1B.306.CLA = fixed socket, nut fixing, with key (G), 1B series, multipole type with 6 contacts, outer shell in chrome-plated brass, PEEK extended insulator, female crimp contacts.

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

- First choice alternative
- In development

Note: 1) for male contacts



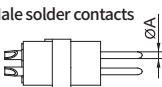
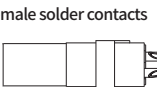
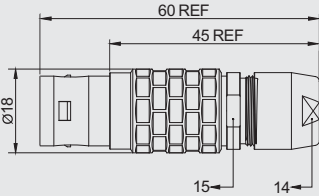
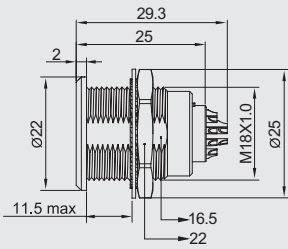
2B Series Insert configuration

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					Number of contact	Cable mm	Solder	Crimp	PCB	Solder		Crimp		
				Plug	Fixed socket											Contact ↑ Contact
51 REF 39 REF Ø15 13 12 → TGG Straight plug, key(G), cable collet 25.8 21.5 1.8 Ø18 8.5 max 13.5 17 M15X10 Ø19.3 → ZGG Fixed socket, nut fixing, key(G) Note: Panel cut-out, nut fixing torque, (page 13)						302	2	2.0	●	●	●	2.10	/	2.10	/	30.0
						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
						314	14	0.7	●	●	●	1.15	/	1.55	/	6.5
						316	16	0.7	●	●	●	1.50	/	1.50	/	6.0
						318	18	0.7	●	●	●	0.85	/	1.45	/	5.5
						319	19	0.7	●	●	●	1.40	/	1.40	/	5.0
						326	26	0.5	●	●	●	1.00	/	1.00	/	2.0
						332	32	0.5	●	●	●	0.7	/	0.7	/	1.5

- First choice alternative
- In development

3 B C L

3B Series Insert configuration

Male solder contacts		Female solder contacts		Insert configuration		Reference	Contact		Contact type			Test voltage (kV rms)				Rated current (A)
		Plug	Fixed socket	Number of contact	Cable mm		Solder	Crimp	PCB	Solder		Crimp				
										Contact ↑ Contact	Contact ↑ Housing	Contact ↑ Contact	Contact ↑ Housing			
Male crimp contacts		Female crimp contacts														
																
																
Note: Panel cut-out, nut fixing torque, (page 13)																
		302	2	3.0	●	●	●	2.10	1.55	2.30	1.80	35.0				
		303	3	2.0	●	●	●	1.90	1.50	3.20	2.65	25.0				
		304	4	2.0	●	●	●	1.45	1.25	2.50	2.20	19.0				
		305	5	1.6	●	●	●	1.90	1.25	2.40	1.75	19.0				
		306	6	1.6	●	●	●	1.60	1.15	1.90	1.80	17.0				
		307	7	1.6	●	●	●	1.70	1.25	2.00	2.05	15.0				
		308	8	1.3	●	●	●	1.65	1.15	1.85	1.75	13.0				
		309	8	1.3	●	●	●	1.35	1.05	1.10	1.05	6.0				
		310	1	2.0	●	●	●	1.35	1.05	1.10	1.05	15.0				
		312	10	1.3	●	●	●	1.25	0.90	1.50	1.80	12.0				
		314	12	0.9	●	●	●	1.45	1.00	1.65	1.85	9.0				
		316	14	0.9	●	●	●	1.20	1.20	1.80	1.65	9.0				
		318	16	0.9	●	●	●	1.20	0.85	1.80	1.50	8.0				
		320	18	0.9	●	●	●	1.20	1.05	1.85	1.60	7.0				
		322	20	0.7	●	●	●	1.00	0.90	1.35	1.55	6.0				
		324	22	0.7	●	●	●	1.00	0.90	1.70	1.45	5.5				
		326	24	0.7	●	●	●	0.95	0.80	1.35	1.35	4.0				
		328	26	0.7	●	●	●	0.95	0.70	1.50	1.30	4.0				
		330	30	0.7	●	●	●	0.80	0.70	1.35	1.20	3.5				

- First choice alternative
- In development

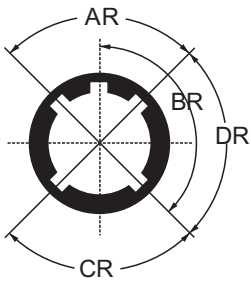
Alignment key (B Series)

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°			

- First choice alternative
- Special order alternative

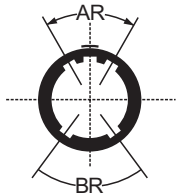
Alignment key (W Series)

3

W

G

L



Front view of a socket

Ref.	Nb of keys	Angles	Series	Contact type		Note
			3W	Plug	Socket	
G	1	–	0°	male	female	●
A	2	AR	30°	male	female	●
B	2		45°	male	female	●
L	2	BR	75°	female	male	○

- First choice alternative
- Special order alternative

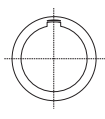
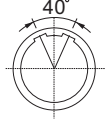
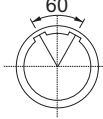
Alignment key (P Series)

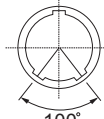
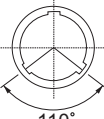
1

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

- First choice alternative
- In development

				C	L				
--	--	--	--	---	---	--	--	--	--

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 ϕC .

			G	L					
--	--	--	---	---	--	--	--	--	--

[illegible]

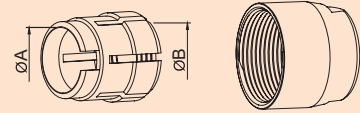
			G	L						
--	--	--	---	---	--	--	--	--	--	-------

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 Φ		Cable Φ		Notes
	Type	Code	ΦA	ΦB	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	—	5.7	> 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)

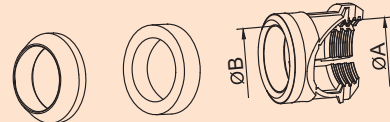
Note: all dimensions are in millimetres.

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)

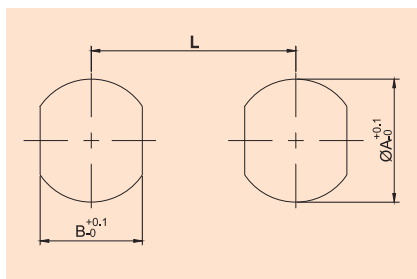


C type collets for W series



	Reference		Collet Φ		Cable Φ		Notes
	Type	Code	ΦA	ΦB	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



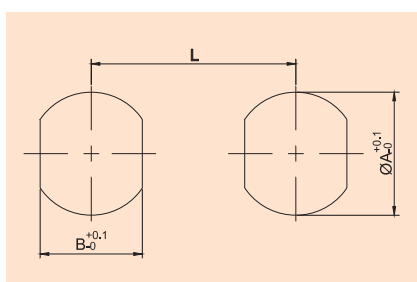
B series

Series	$\varnothing A$	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



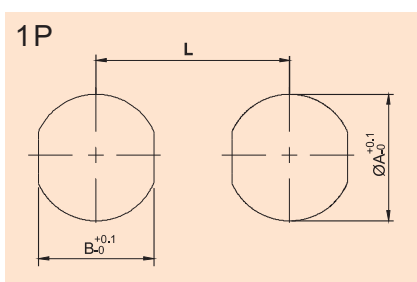
W series

Series	$\varnothing A$	B	L
3W	20.2	18.6	30.0

Mounting nut torque

Series	Torque (Nm)
3W	12

1N=0.102kg



1P

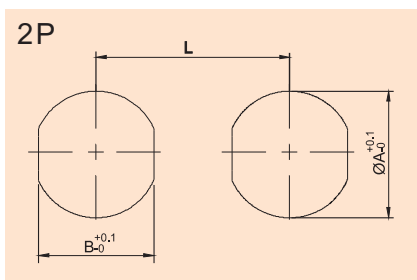
P series

Series	$\varnothing A$	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



2P

Beijing Olympic Stadium(Bird's Nest) project and Beijing Olympic Opening Ceremony
 China Import and Export Fair Complex
 Guangzhou Baiyun International Convention Center
 Lingao, Yangjiang and Taishan Nuclear Power Station
 Guangdong Huangpu Power Plant
 China Mobile, China Telecom
 Nanning international Convention and Exhibition Center
 Sinopec Maoming ethylene project
 The Three Gorges river closure project
 Zhongshan ABB transformer distribution box
 Guiyang Grand Theater Project
 Shanghai Oriental Art Center project
 Beijing/Shanghai/Guangzhu Metro Network Project
 Workshop reconstruction project of Changchun No.1 Automobile Factory
 Daqing Oilfield project
 Lighting system of Tiananmen Square for the 60th anniversary of National Day
 Shanghai World Expo project and Lighting system for opening ceremony
 Qingdao Grand Theatre
 Shanghai GM powertrain workshop
 Zhejiang Yourworld International Conference Center
 Shanghai Hongqiao Airport Terminal 2
 The TMRT 65-m radio telescopes of Shanghai Astronomical Observatory (Tianma Radio Telescope)

MAIN PROJECTS