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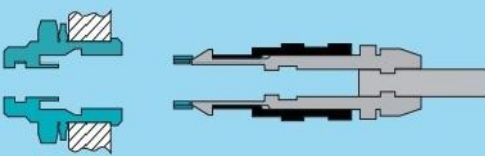
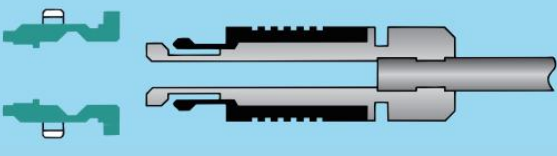
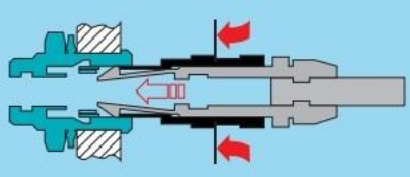
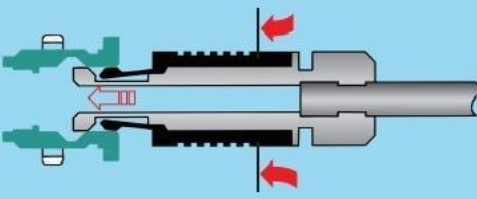
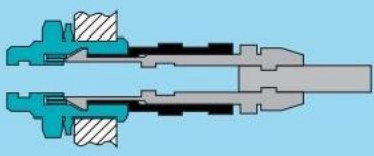
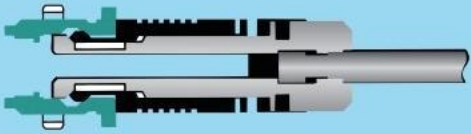
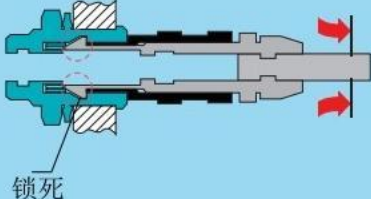
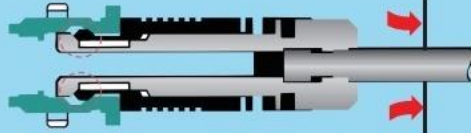
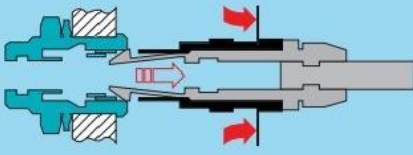
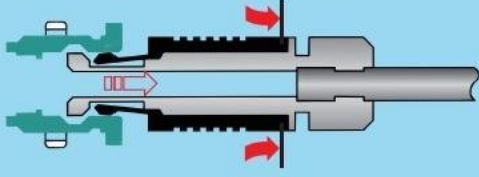
YGD Series	108
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YW06/08 Series	119
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YW Series	121
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BLITZConnect Push-Pull Self-Latching Connection System:

When the plug is inserted into the socket, the locking shrapnel of the plug is embedded in the groove of the socket, locking the plug inside the socket. When pulling the tail of the plug or pulling the cable, the plug and socket cannot be separated because the locking shrapnel is stuck in the socket groove. When the plug housing is removed, the plug locking shrapnel is released from the socket groove and the plug and socket are separated.

Series	P、B、K、T、TLK series	TLU、TLB、TLF、TLY series
Separated		
Push in		
Working		
Locking		
Unlocking		

1P Series



Technical Characteristics

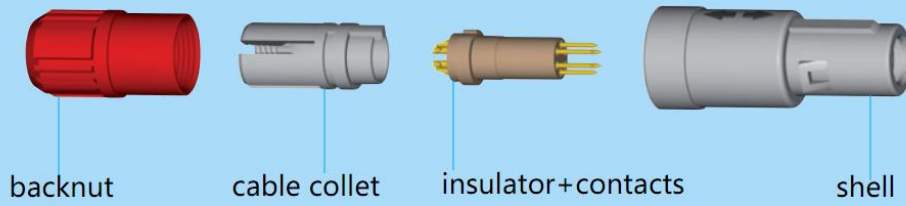
- Plastic shell diameter: 14mm
- plastic shell: PC PSU
- pole: 2 ~ 14 pole
- Contact type: solder、PCB print、90°elbow print
- Temperature range: -40℃~+120℃
- Endurance: ≥2000 recycles
- Insulation resistance: ≥3000MΩ
- Economical, simple and practical, automatic crimping pins, easy assembly, easy to plug and pull
- Other advantages:
 - 100% touch protection
 - lightweight, low force to plug and pull
 - nonmagnetic
 - uperization, alcohol resistance
- Other features
- Indoor application, dust proof, IP50
- disposable type
- uperization
- Operation current & contact resistance:

Contact Ø (mm)	Contact resistance (mΩ)	Rated current(A)	Max cable size	
			mm ²	AWG
0.5	15	1	0.15	26
0.7	12.5	3	0.2	24
0.9	9	5	0.3	22
1.3	5	10	0.5	20

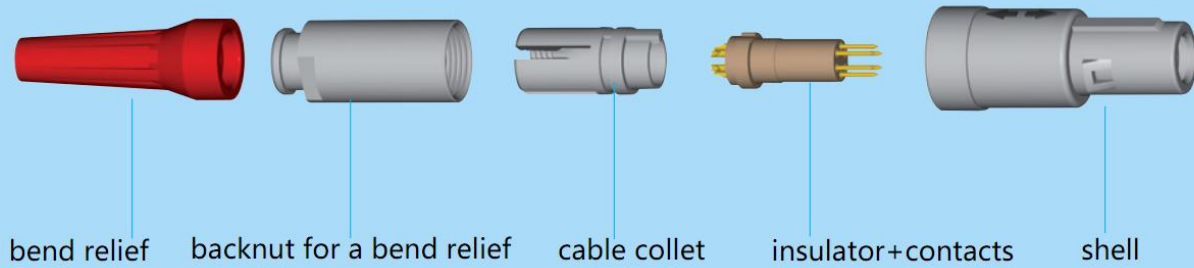
- Operation voltage & voltage resistance:

Shell No.	Number of contacts	Rated voltage: V		Voltage resistance: V	
		Sea level	Altitude 21336m	Sea level	Altitude 21336m
1P	02、03	300	150	1000	250
	04、05、06、07、08	250	125	875	225
	09、10、14	200	100	750	175

Straight plug

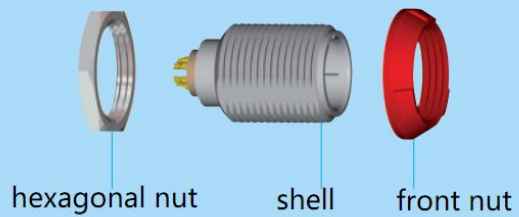


Straight plug with bend relief

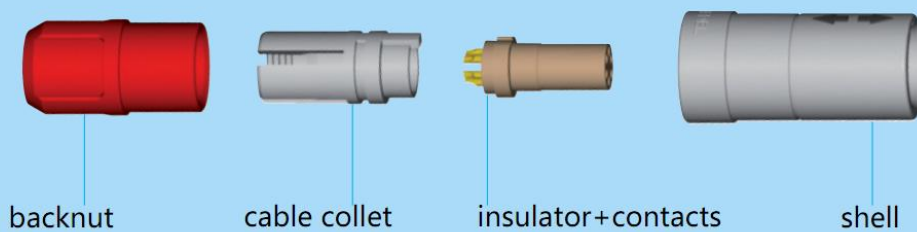


Note: The bend relief must be ordered separately.

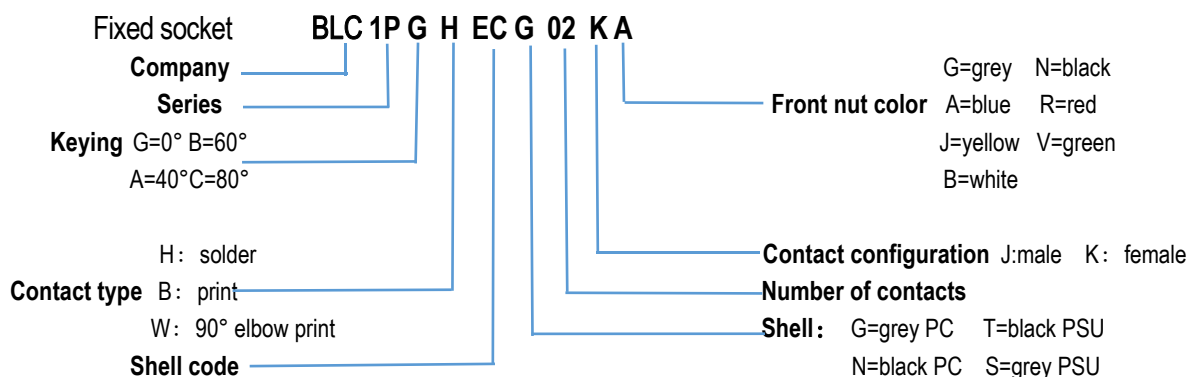
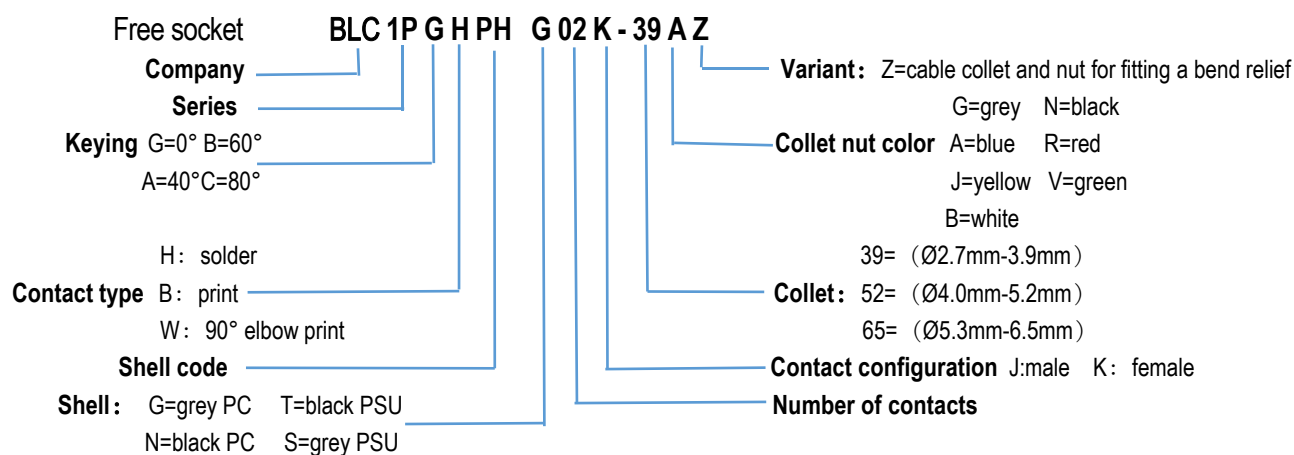
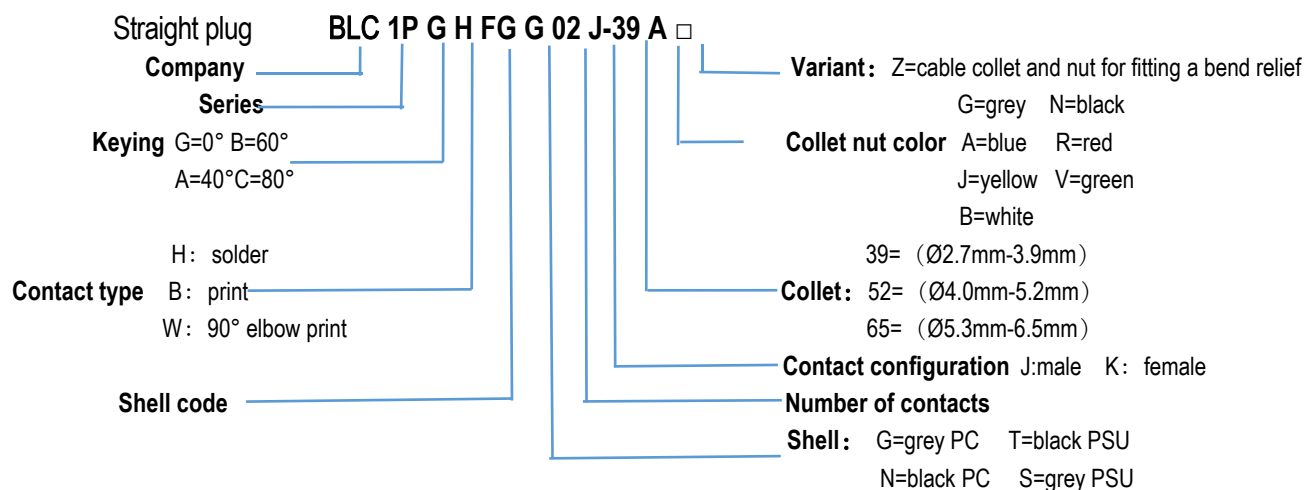
Fixed socket



Free socket



Part numbering system



Part numbering system example

Straight plug:

BLC 1PGHFGG02J-39A = BLC 1P series, key (G)0°, solder contact, FG straight plug, grey PC outershell, multipole 2 male contacts, collet for a cable Ø2.7mm-3.9mm and blue collet nut.

Free socket:

BLC 1PGHPHGO2K-39AZ = BLC 1P series, key (G)0°, solder contact, PH free socket, grey PC outershell, multipole 2 female contacts, collet for a cable Ø2.7mm-3.9mm and blue collet nut.

Fixed socket:

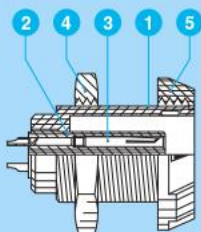
BLC 1PGHECGO2KA = BLC 1P series, key (G)0°, solder contact, EC fixed socket, grey PC outershell, multipole 2 female contacts, and blue plastic front nut.

Стандартные модели

Вид в разрезе

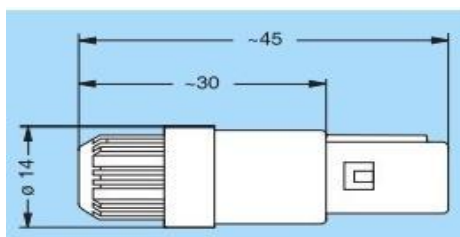
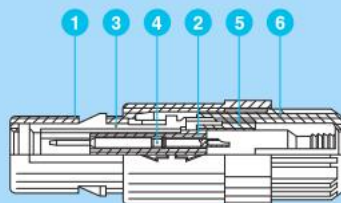
Приборная часть

- 1 Внешняя оболочка
- 2 Изолятор
- 3 Контакт розетки
- 4 Внутренняя гайка
- 5 Внешняя гайка



Кабельная часть

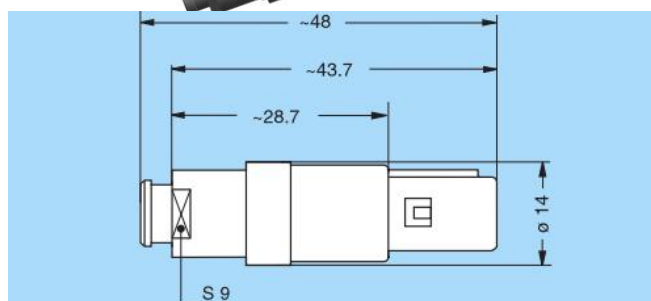
- 1 Внешняя оболочка
- 2 Изолятор
- 3 Втулка защелки
- 4 Контакт вилки
- 5 Кабельная цанга
- 6 Внутренняя гайка



FG Прямая вилка, ключ (G) или ключи (A, B и C), с кабельной цангой

Наименование
1PGHFGG*J-39G
1PGHFGG*J-52G
1PGHFGG*J-65G

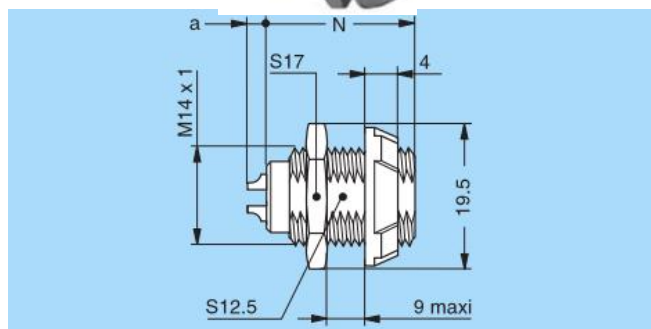
Кабель Ø (мм)	
мин	max
2.7	3.9
4.0	5.2
5.3	6.5



FG Прямой штекер, ключ (G) или ключи (A, B и C), с кабельной цангой и гайкой для устранения сильного изгиба хвостовика

Наименование
1PGHFGG*J-39GZ
1PGHFGG*J-52GZ
1PGHFGG*J-65GZ

Кабель Ø (мм)	
мин	max
2.7	3.9
4.0	5.2
5.3	6.5

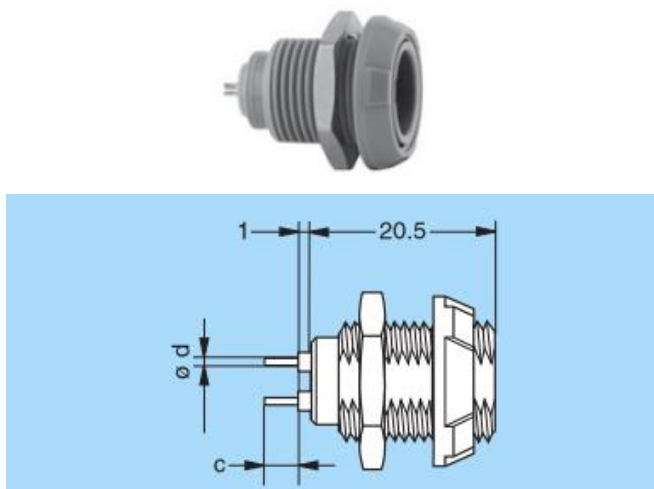


EC Приборная розетка, ключ (G) или ключи (A, B и C), крепление гайкой

Наименование
1PGHECG02G
1PGHECG03G
1PGHECG04G
1PGHECG05G
1PGHECG06G
1PGHECG07G
1PGHECG08G
1PGHECG09G
1PGHECG10G
1PGHECG14G

Количество контактов	Контакт под прибор	
	N	a max
2	20.5	2.5
3	20.5	2.5
4	20.5	2.5
5	20.5	2.5
6	20.5	2.5
7	20.5	2.5
8	20.5	2.5
9	20.5	3.9
10	20.5	3.9
14	20.5	3.9

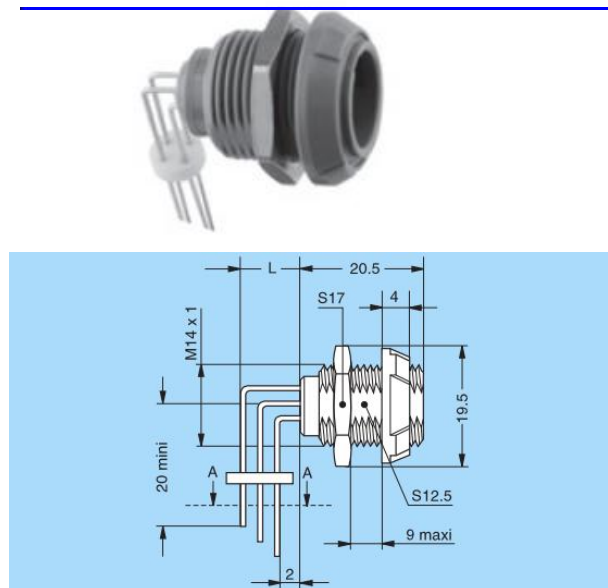
Примечание: все размеры указаны в мм.



EC Приборная розетка, ключ (G) или ключи (A, B и C), гайка

Part Number	Number of contacts	Contact Print	
		C	Ød
1PGBECG02G	2	5	0.7
1PGBECG03G	3	5	0.7
1PGBECG04G	4	5	0.7
1PGBECG05G	5	5	0.7
1PGBECG06G	6	3	0.5
1PGBECG07G	7	3	0.5
1PGBECG08G	8	3	0.5
1PGBECG09G	9	3	0.5
1PGBECG10G	10	3	0.5
1PGBECG14G	14	3	0.5

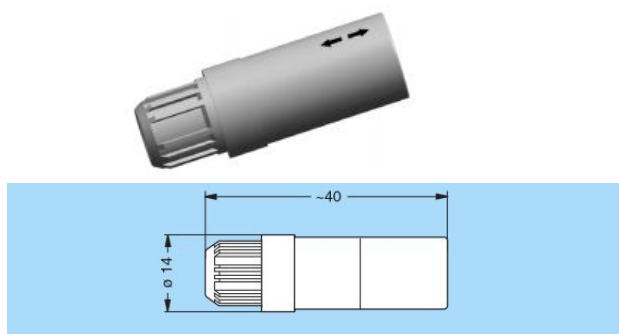
Note: for PCB drilling pattern and panel hole, see page 11, table 3



EC Приборная розетка, ключ (G) или ключи (A, B и C), с двумя гайками, с контактами 90° (монтаж на заднюю панель)

Part Number	Number of contacts	L
1PGWECG02G	2	5.44
1PGWECG03G	3	5.24
1PGWECG04G	4	5.24
1PGWECG05G	5	7.78
1PGWECG06G	6	7.78
1PGWECG07G	7	7.78
1PGWECG08G	8	7.78
1PGWECG09G	9	10.32
1PGWECG10G	10	10.32
1PGWECG14G	14	12.86

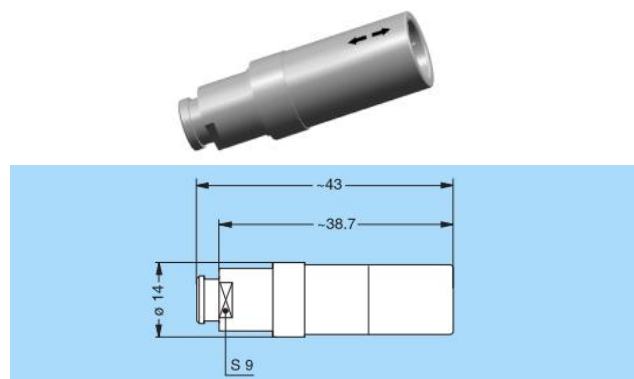
Note: for PCB drilling pattern (see page 12, table 4)



PH Кабельная розетка, ключ (G) или ключи (A, B и C), с кабельной цангой

Наименование	Кабель Ø (mm)	
	min	max
1PGHPHG*J-39G	2.7	3.9
1PGHPHG*J-52G	4.0	5.2
1PGHPHG*J-65G	5.3	6.5

Note: replace * by contact configuration (see page 9, table 1)



PH Кабельная розетка, ключ (G) или ключи (A, B и C), с кабельной цангой и гайкой для установки компенсатора изгиба

Наименование	Кабель Ø (mm)	
	min	max
1PGHPHG*J-39GZ	2.7	3.9
1PGHPHG*J-52GZ	4.0	5.2
1PGHPHG*J-65GZ	5.3	6.5

Note: replace * by contact configuration (see page 9, table 1).
The bend relief must be ordered separately (see page 11, table 2).

Примечание: все размеры указаны в мм.

Конфигурация вставки

1P

	Контакт вилки под пайку	Контакты розетки под пайку	Обозначение	Количество контактов	Контакт Ø	Размер под припой Ø(мм)	Тип контакта		
							Припой	На печатную плату прямой контакт	На печатную плату угловой контакт
			02	2	1.3	1.20	●	●	●
			03	3	1.3	1.20	●	●	●
			04	4	0.9	0.85	●	●	●
			05	5	0.9	0.85	●	●	●
			06	6	0.7	0.6	●	●	●
			07	7	0.7	0.6	●	●	●
			08	8	0.7	0.6	●	●	●
			09	9	0.5	0.5	●	●	●
			10	10	0.5	0.5	●	●	●
			14	14	0.5	0.5	●	●	●

Ключ выравнивания

Чертёж	0°	40°	60°	80°
Обозначение	G	A	B	C
Тип контакта для вилки	штырь	штырь	штырь	штырь
Тип контакта для розетки	гнездо	гнездо	гнездо	гнездо
Количество контактов	2 ~ 14			

Outer shell material

Material	Ref.	Color	Temperature
PC	G	Grey	-40°/+125°C
PC	N	Black	
PSU	S	Grey	-50°/+150°C
PSU	T	Black	

Contact type (Select the type of contact: solder or print?)

Contact type	Male	Female
Solder	H	H
Print	-	B
Print 90°elbow	-	W

Color coding

	Color						
	Grey	Blue	Yellow	Black	Red	Green	White
Reference	G	A	J	N	R	V	B
RAL code	7001	5002	1016	9005	3020	6024	9003

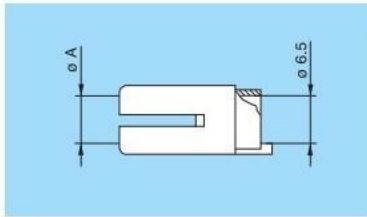
Note:

The RAL colors are indicative and depend on raw material and production process. Color may differ.

Easy identification with the assistance of color coding.

Outershell is only available in grey or black.

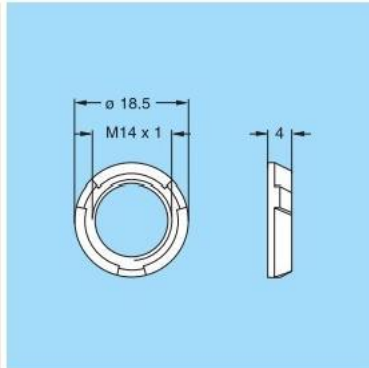
PLA Cable collet



Part number	Ø A (mm)	Cable Ø (mm)	
		min	max
PLA.739. · ·	3.9	2.7	3.9
PLA.752. · ·	5.2	4.0	5.2
PLA.765. · ·	6.5	5.3	6.5

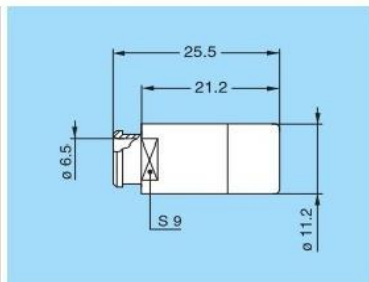
Note: · · =UG (grey PC), TN (black PSU) or UN (black PC)

PKG Front nut



Part number	Material	Color
PKG.220.UA	PC	Blue
PKG.220.UB	PC	White
PKG.220.UG	PC	Grey
PKG.220.UJ	PC	Yellow
PKG.220.UN	PC	Black
PKG.220.UR	PC	Red
PKG.220.UV	PC	Green
PKG.220.TG	PSU	Grey
PKG.220.TN	PSU	Black

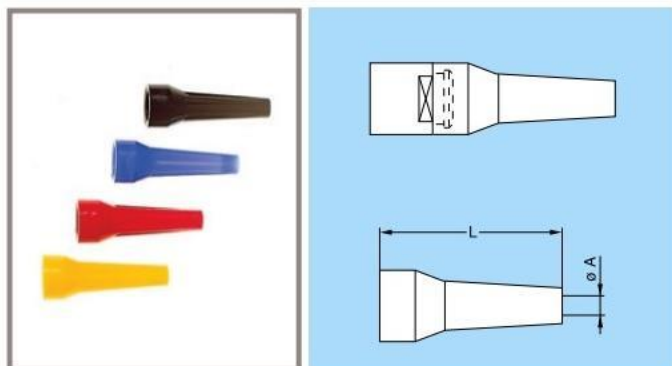
PAM Tail nut cap, For mounting 1B bend relief



Part number	Material	Color
PAM.130.UA	PC	Blue
PAM.130.UB	PC	White
PAM.130.UG	PC	Grey
PAM.130.UJ	PC	Yellow
PAM.130.UN	PC	Black
PAM.130.UR	PC	Red
PAM.130.UV	PC	Green
PAM.130.TN	PSU	Black
PAM.130.TG	PSU	Grey

Note: all dimensions are in mm

GMA.1B Bend relief (table 2)



Part number	Dimensions (mm)				Material	Temperature range		Reference	Color
	Bend relief	Cable Ø				In dry atmosphere	In water steam		
	A	L	max	min					
GMA.1B.025.DG	2.5	30	2.9	2.5	Polyurethane 786(TPU)	-40°C, +80°C	-	A	Blue
GMA.1B.030.DG	3.0	30	3.4	3.0				B	White
GMA.1B.035.DG	3.5	30	3.9	3.5				G	Grey
GMA.1B.040.DG	4.0	30	4.4	4.0				J	Yellow
GMA.1B.045.DG	4.5	30	4.9	4.5				M	Brown
GMA.1B.054.DG	5.4	30	6.0	5.4				N	Black
GMA.1B.065.DG	6.5	30	7.0	6.5				R	Red
								S	Orange
								V	Green

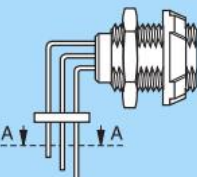
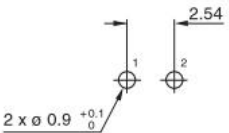
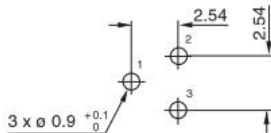
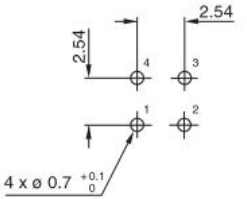
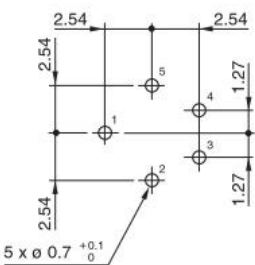
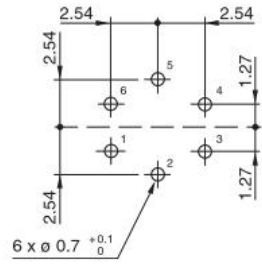
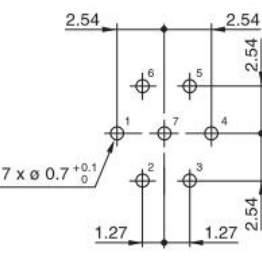
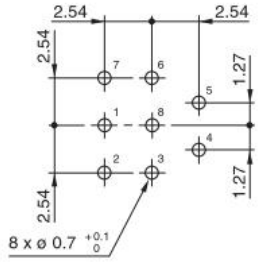
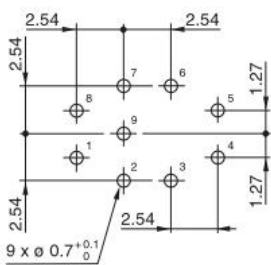
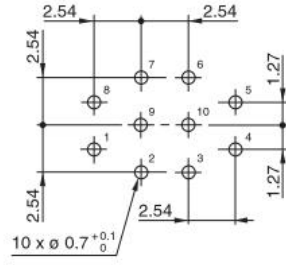
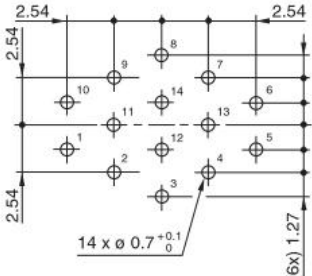
Note: the last letter G of the part number indicates a grey color, see the adjacent table and replace letter G by the letter of the color required.

PCB drilling pattern (table 3)

02	03	04	05
06	07	08	09
10	14		

Note: all dimensions are in mm

For 90° elbow contacts (table 4)

	 02	 03	 04
 05	 06	 07	 08
 09	 10	 14	

Note: all dimensions are in mm

B Series

B Series Technical Characteristics

- Temperature range: -55 °C--+125 °C;
- Humidity: 90% - 95%(40±2°C);
- Air pressure range: 4.39KPa-- 101.33KPa;
- Resistance to vibrations: 10Hz--2000Hz,
Accelerated speed: 147m/S², Instant break≤1us ;
- Shock resistance: 980m/s², Instant break≤1us;
- Sealing: IP50 dustproof, indoor application;
- Salt spray corrosion test: 5%NaCl fog, 96H;
- Endurance: ≥5000 recycles;
- Insulation resistance: ≥5000MΩ (normal temperature);



B SERIES

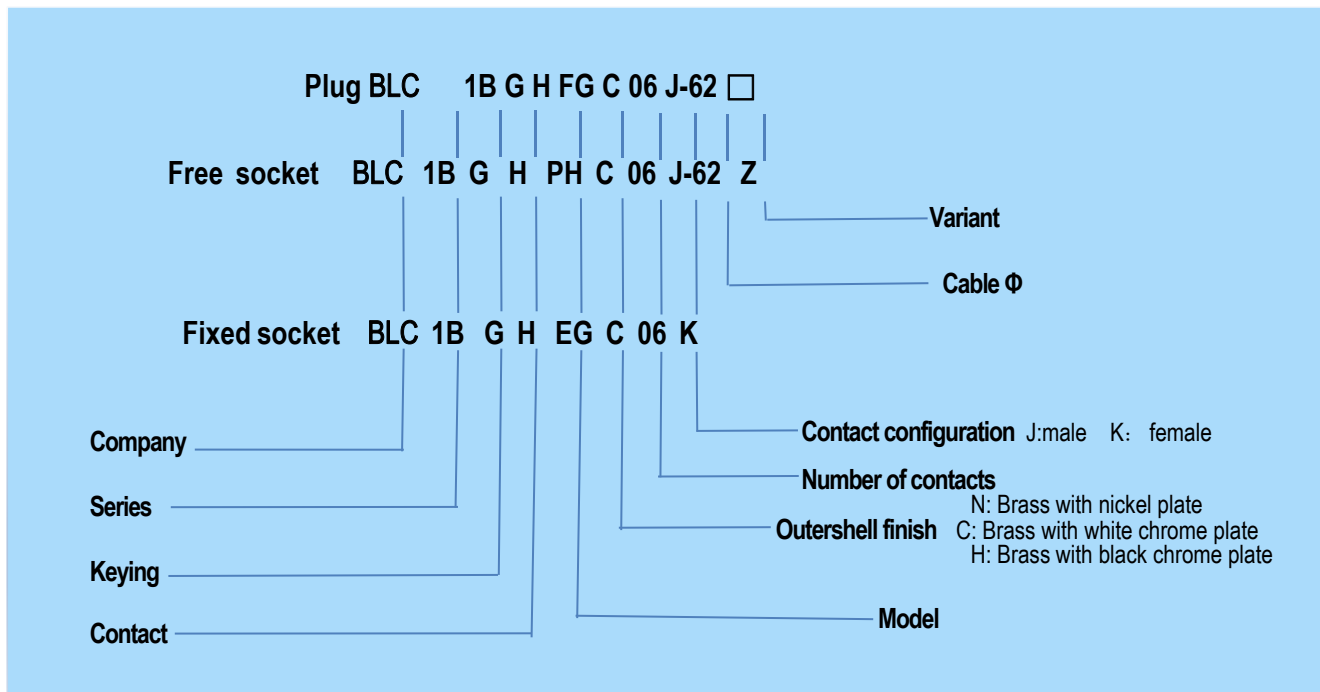
• Operation current & contact resistance :

Contact Ø (mm)	Contact resistance (mΩ)	Rated current(A)	Max cable size	
			mm²	AWG
0.5	15	1	0.15	26
0.7	12.5	3	0.2	24
0.9	9	5	0.3	22
1.3	5	10	0.5	20
1.6	4	15	2.0	14
2.0	3.5	20	2.0	14
2.3	3	23	3.0	12
3	2.5	30	4.8	10

• Operation voltage & voltage resistance :

Shell No.	Number of contacts	Rated voltage: V		Voltage resistance: V	
		Sea level	Altitude 21336m	Sea level	Altitude 21336m
00	02、03、04、05	200	125	750	175
0B	02、03	250	125	875	225
	04、05、06、07、09	200	100	750	175
1B	02、03	300	150	1000	250
	04、05、06、07、08	250	125	875	225
	10、12、14、16	200	100	750	175
2B	02、03、04、05、06、07、08、10	300	150	1000	250
	12、14、16	250	125	875	225
	18、19、26、32	200	100	750	175
3B	02、03、04、05、06	300	150	1000	250
	07、08、09、10、12、14、16、18	250	125	875	225
	20、22、24、26、30	200	100	750	175

Part numbering system



Part numbering system example

Straight plug with key(G) and cable collet :

BLC 1BGHFGC06J-62 = BLC 1B Series, keying (G), solder contacts, FG straight plug, outershell in chrome-plated brass, multipole type with 6 contacts, collet for $\varnothing$ 6.0 mm cable, and collet nut.

Free socket with key(G) and cable collet :

BLC 1BGHPHC06K-62Z = BLC 1B Series, keying (G), solder contacts, PH free socket, outershell in chrome-plated brass, multipole type with 6 contacts, collet for $\varnothing$ 6.0 mm cable, and collet nut.

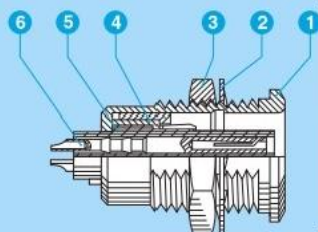
Fixed socket, nut fixing, with key(G) :

BLC 1BGHEGC06K = BLC 1B Series, keying (G), solder contacts, EG fixed socket, outershell in chrome-plated brass, multipole type with 6 contacts.

Sectional view

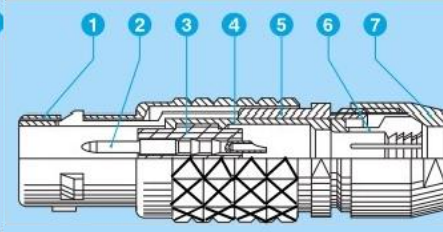
Fixed socket

1. Outer shell
2. Locking washer
3. Hexagonal nut
4. Earthing crown
5. Insulator
6. Female contact

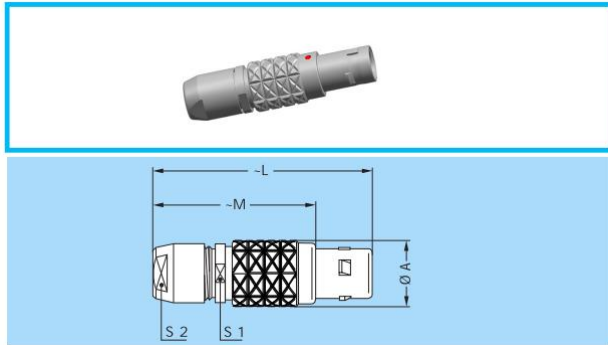


Straight plug

1. Outer shell
2. Male contact
3. Insulator
4. Split insert carrier
5. Latch sleeve
6. Collet
7. Collet nut

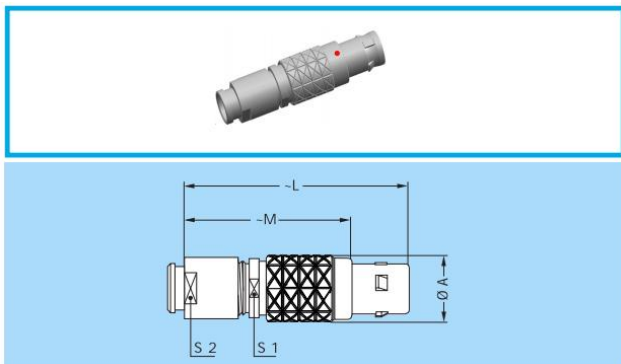


Metal housing models



FG Straight plug, key(G) or keys(A ...L), cable collet

Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
FG	00	6.4	28.5	20.5	5.5	5
FG	0B	9.5	36.0	26.0	8.0	7
FG	1B	12.0	43.0	32.0	10.0	9
FG	2B	15.0	50.0	38.0	13.0	12
FG	3B	18.0	58.0	43.0	15.0	14

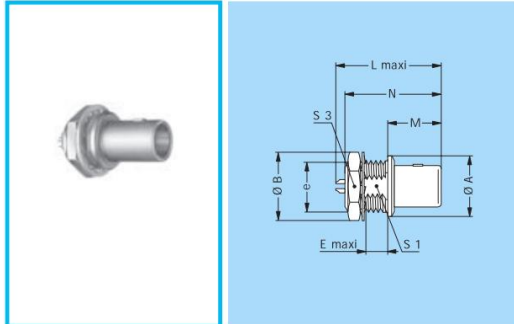


FG Straight plug, key(G) or keys(A...L), cable collet and nut for fitting a bend relief¹⁾

Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
FG	00	6.4	36.5	28.5	5.5	6
FG	0B	9.5	35.0	25.0	8.0	7
FG	1B	12.0	42.0	31.0	10.0	9
FG	2B	15.0	49.0	37.0	13.0	12
FG	3B	18.0	56.5	41.5	15.0	15

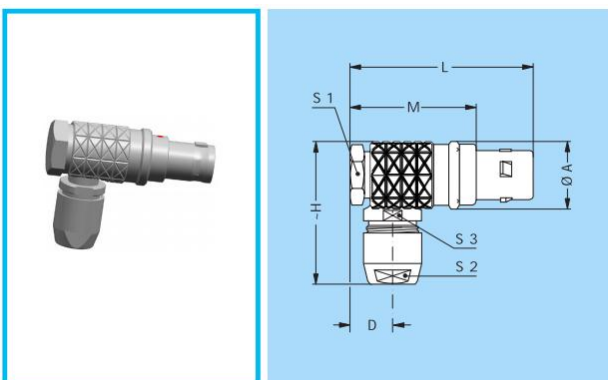
Note: 1)to order, add a "Z"

The bend relief must be ordered separately (see page 33).



FA Fixed plug, non-latching, nut fixing, key(G) or keys(A...L)

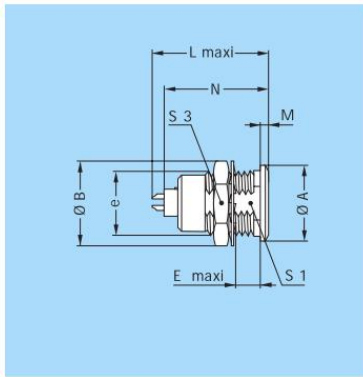
Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N	S1	S3
FA	00	8	10.2	M7x0.5	2.9	18.1	9.0	15.0	6.3	9
FA	0B	10	12.4	M9x0.6	4.2	20.8	11.2	8.9	8.2	11
FA	1B	14	15.8	M12x1.0	5.4	25.2	12.5	21.6	10.5	14
FA	2B	18	19.2	M15x1.0	6.0	28.7	13.8	23.9	13.5	17
FA	3B	22	25.0	M18x1.0	5.8	32.1	17.0	30.2	16.5	22



FH Elbow 90° plug, key(G) or keys(A...L), cable collet

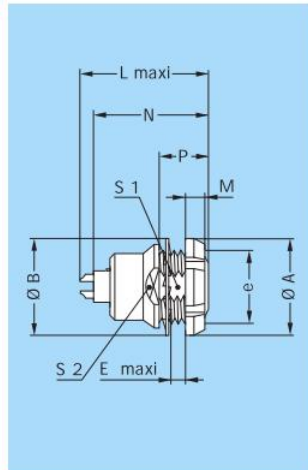
Reference		Dimensions (mm)							
Model	Series	A	D	H	L	M	S1	S2	S3
FH	00	7.7	5.2	18.0	24.5	16.5	7	5	5.5
FH	0B	11.0	6.5	26.0	31.6	21.6	10	7	8.0
FH	1B	13.5	8.0	30.5	36.0	25.0	11	9	10.0
FH	2B	16.5	9.0	34.0	41.5	29.5	14	12	13.0
FH	3B	19.0	10.0	37.0	50.0	35.0	17	14	15.0

Note: all dimensions are in mm



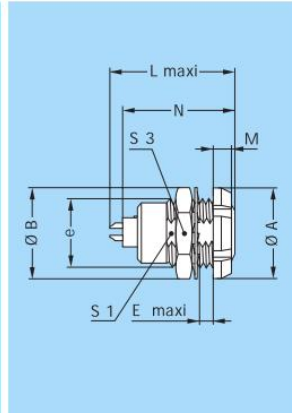
EG Fixed socket, nut fixing, key(G) or keys (A...L)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N	S1	S3
EG	00	8	10.2	M7x0.5	6.0	15.5	1.0	13.7	6.3	9
EG	0B	10	12.4	M9x0.6	7.0	20.7	1.2	19.1	8.2	11
EG	1B	14	15.8	M12x1.0	7.5	23.0	1.5	21.1	10.5	14
EG	2B	18	19.2	M15x1.0	8.5	26.7	1.8	24.6	13.5	17
EG	3B	22	25.0	M18x1.0	11.5	30.7	2.0	28.1	16.5	22



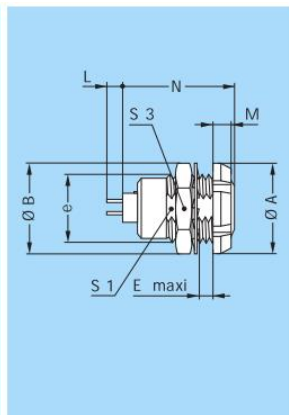
EE Fixed socket, nut fixing, key(G) or keys(A...L) (back panel mounting)

Reference		Dimensions (mm)									
Model	Series	A	B	e	E	L	M	N	P	S1	S2
EE	00	10	9.5	M7x0.5	2.3	15.5	2.5	13.7	6.0	6.3	7.5
EE	0B	12	12.5	M9x0.6	2.4	20.7	2.5	19.1	6.3	8.2	9.0
EE	1B	16	16.0	M12x1.0	6.5	23.0	3.5	21.1	11.0	10.5	13.0
EE	2B	20	20.0	M15x1.0	3.0	26.7	3.5	24.6	9.0	13.5	15.0
EE	3B	24	25.0	M18x1.0	5.0	30.7	4.5	28.1	12.0	16.5	20.0



EC Fixed socket with two nuts, key(G) or keys(A...L) (back panel mounting)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N	S1	S3
EC	00	10	10.2	M7x0.5	4.3	13.7	2.5	13.7	6.3	9
EC	0B	12	12.4	M9x0.6	5.5	20.7	2.5	19.1	8.2	11
EC	1B	16	15.8	M12x1.0	6.0	23.0	3.5	21.1	10.5	14
EC	2B	20	19.2	M15x1.0	6.5	26.7	3.5	24.6	13.5	17
EC	3B	24	25.0	M18x1.0	9.0	30.7	4.5	28.1	16.5	22

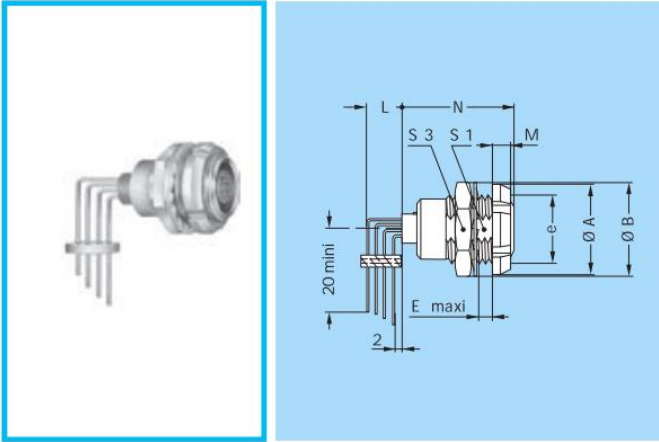


EC Fixed socket with two nuts, key(G) or keys(A...F and R) and straight contact for printed circuit (back panel mounting)

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	M	N	S1	S3
EC	00	10	10.2	M7x0.5	4.3	2.5	13.7	6.3	9
EC	0B	12	12.4	M9x0.6	5.5	2.5	16.4	8.2	11
EC	1B	16	15.8	M12x1.0	6.0	3.5	19.8	10.5	14
EC	2B	20	19.2	M15x1.0	6.5	3.5	21.8	13.5	17
EC	3B	24	25.0	M18x1.0	9.0	4.5	25.8	16.5	22

Note: This contact type is available for E● socket models fitted with female contacts.
Length "L" depends on the number of contacts, PCB drilling pattern see page 35.

Note: all dimensions are in mm



EC Fixed socket with two nuts, key(G) or keys(A...M) with elbow 90° contact for printed circuit (back panel mounting)

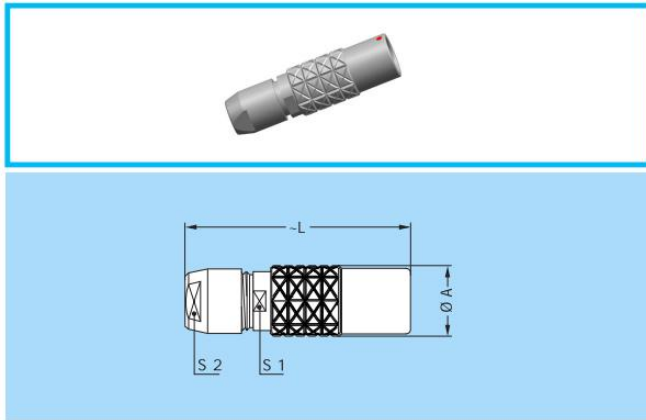
Reference		Dimensions (mm)							
Model	Series	A	B	e	E	M	N _{max}	S1	S3
EC	0B	12	12.4	M9x0.6	2.4	2.5	18.3	8.2	11
EC	1B	16	15.8	M12x1.0	6.0	3.5	20.3	10.5	14
EC	2B	20	19.2	M15x1.0	6.5	3.5	22.3	13.5	17
EC	3B	24	25.0	M18x1.0	9.0	4.5	25.8	16.5	22

Note: This contact type is available for all socket models

fitted with back panel mounting.

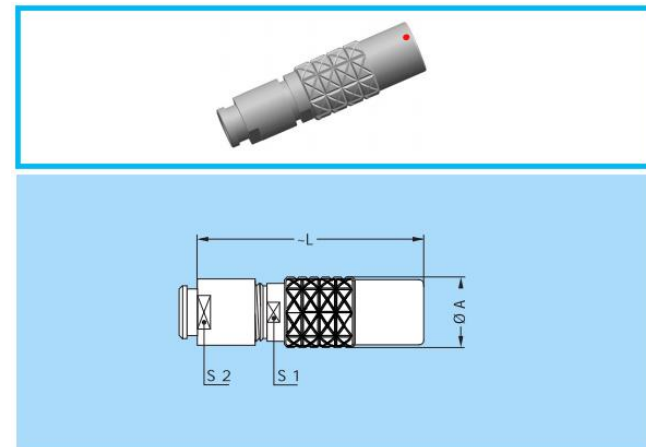
Length "L" depends on the number of contacts, PCB

Drilling pattern see page 37.



PH Free socket, key(G) or keys(A...M), cable collet

Reference		Dimensions (mm)			
Model	Series	A	L	S1	S2
PH	00	6.8	26.0	5.5	5
PH	0B	9.5	35.5	8.0	7
PH	1B	12.5	40.5	10.0	9
PH	2B	16.5	47.0	13.0	12
PH	3B	19.0	56.0	15.0	14

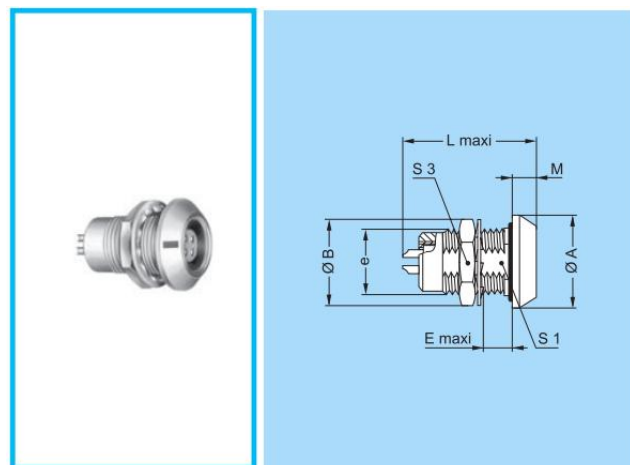


PH Free socket, key(G) or keys(A...M), cable collet and nut for fitting a bend relief1)

Reference		Dimensions (mm)			
Model	Series	A	L	S1	S2
PH	00	6.8	34.0	5.5	6
PH	0B	9.5	34.5	8.0	7
PH	1B	12.5	39.5	10.0	9
PH	2B	16.5	46.0	13.0	12
PH	3B	19.0	54.5	15.0	15

Note : 1)to order, add a "Z" at the end of the reference.

The bend relief must be ordered separately (see page 33).



HG Fixed socket, nut fixing, key(G) or keys(A...M), watertight or vacuumtight

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	S1	S3
HG	00	11	10.2	M7x0.5	8.0	18.0	1.5	-	9
HG	0B	13	12.4	M9x0.6	7.0	21.5	3.0	8.2	11
HG	1B	18	15.8	M12x1.0	7.0	26.6	4.5	10.5	14
HG	2B	20	19.2	M15x1.0	8.0	31.6	4.0	13.5	17
HG	3B	25	25.0	M18x1.0	11.5	36.1	4.0	16.5	22

Note: all dimensions are in mm

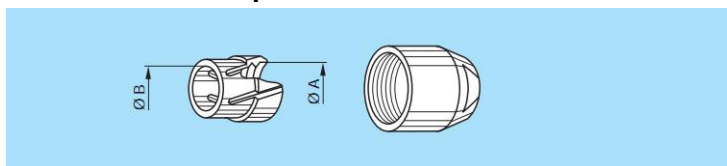
Alignment Key and Polarized Keying System

B series connector model part numbers are composed of two letters. The last letter indicates the key position and the contact type (male or female).

Front view of a socket	Ref.	Nb of keys	Angles	Series			Ref.	Nb of keys	Angles	Series		Contact type		Note
				00	0B	1B				2B	3B	Plug	Socket	
	G	1		0°	0°	0°	G	1		0°	0°	male	female	●
	A	2	α	30°	30°	30°	A	2	α	30°	30°	male	female	●
	B	2		60°	60°	60°	B	2		45°	45°	male	female	●
	C	2		-	90°	90°	C	2		60°	60°	male	female	●
	D	2	β	-	135°	135°	D	2	Y	95°	95°	male	female	○
	E	2		-	145°	145°	E	2		120°	120°	male	female	○
	F	2		-	155°	155°	F	2		145°	145°	male	female	○
	J	2	Y	45°	45°	45°	J	2	α	37.5°	37.5°	female	male	●
	K	2		-	70°	70°	K	2		52.5°	52.5°	female	male	○
	L	2		-	80°	80°	L	2		70°	70°	female	male	○

- First choice alternative
- Special order alternative

Suitable for B series wire clamps



	number	Wire clips Ø		Cable diameter Ø		remark
	encode	ØA	ØB	min	max	
00	22	2.2	-	1.4	2.2	
	27	2.7	-	>2.2	2.7	
	32	3.2	2.8	>2.7	3.2	
0B	32	3.2	-	2.2	3.2	
	42	4.2	-	3.3	4.2	
	52	5.2	5.2	4.3	5.2	
1B	42	4.2	-	3.2	4.2	
	52	5.2	-	4.3	5.2	
	62	6.2	-	5.3	6.2	
	72	7.2	7.0	6.3	7.2	
2B	52	5.2	-	4.2	5.2	
	62	6.2	-	5.3	6.2	
	72	7.2	-	6.3	7.2	
	82	8.2	-	7.3	8.2	
	92	9.2	9.2	8.3	9.2	
3B	62	6.2	-	5.3	6.2	
	72	7.2	-	6.3	7.2	
	82	8.2	-	7.3	8.2	
	92	9.2	-	8.3	9.2	
	10	10.2	-	9.3	10.0	
	11	11.2	-	10.1	11.0	
	12	11.9	10.2	11.1	11.7	

K Series

K Series Technical Characteristics

- Temperature range: -55°C --+125 °C
- Humidity: 90%-95%(40±2°C)
- Air pressure range: 4.39KPa-- 101.33KPa
- Resistance to vibrations: 10Hz--2000Hz
Accelerated speed 147m/s², Instant break≤1us
- Shock resistance: 980m/S², Instant break≤1us
- Sealing: IP68 watertight, outdoor application
- Salt spray corrosion test: 5%NaCl fog, 96H
- Endurance: ≥5000 recycles
- Insulation resistance: 5000MΩ (normal temperature)



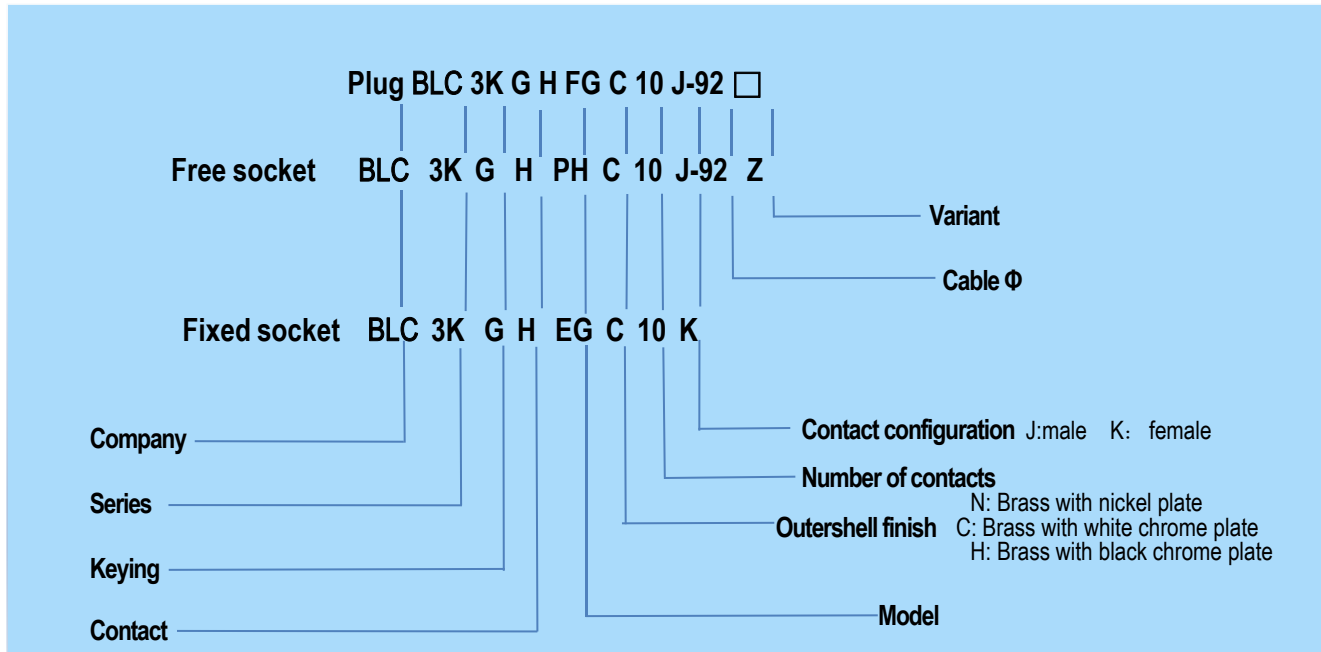
•Operation current & contact resistance:

Contact Ø (mm)	Contact resistance (mΩ)	Rated current(A)	Max cable size	
			mm ²	AWG
0.5	15	1	0.15	26
0.7	12.5	3	0.2	24
0.9	9	5	0.3	22
1.3	5	10	0.5	20
1.6	4	15	2.0	14
2.0	3.5	20	2.0	14
2.3	3	23	3.0	12
3	2.5	30	4.8	10

•Operation voltage & voltage resistance:

Shell No.	Number of contacts	Rated voltage: V		Voltage resistance: V	
		Sea level	Altitude 21336m	Sea level	Altitude 21336m
0K	02、03	250	125	875	225
	04、05、06、07、09	200	100	750	175
1K	02、03	300	150	1000	250
	04、05、06、07、08	250	125	875	225
	10、12、14、16	200	100	750	175
2K	02、03、04、05、06、07、08、10	300	150	1000	250
	12、14、16	250	125	875	225
	18、19、26、32	200	100	750	175
3K	02、03、04、05、06	300	150	1000	250
	07、08、09、10、12、14、16、18	250	125	875	225
	20、22、24、26、30	200	100	750	175

Part numbering system



Part numbering system example

Straight plug with key(G) and cable collet:

BLC 3KGHFGC10J-92 = BLC 3K Series, key(G), male solder contacts, FG straight plug, outer shell in chrome-plated brass, multipole type with 10 contacts, cable collet diameter 9.0mm and nut for fitting a bend relief.

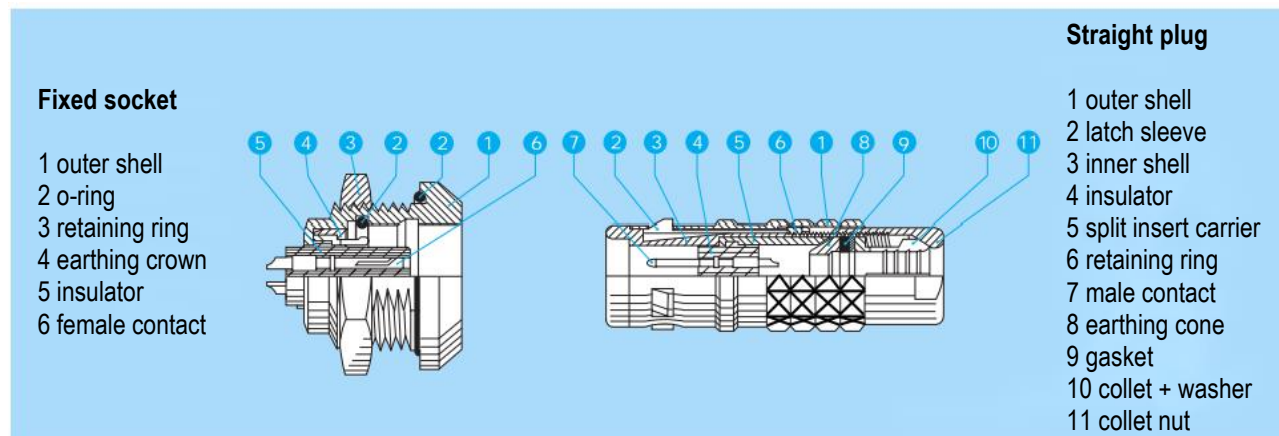
Free socket with key(G) and cable collet:

BLC 3KGHPHC10K-92Z = BLC 3K Series, key(G), female solder contacts, PH free socket, outer shell in chrome-plated brass, multipole type with 10 contacts, cable collet diameter 9.0mm and nut for fitting a bend relief.

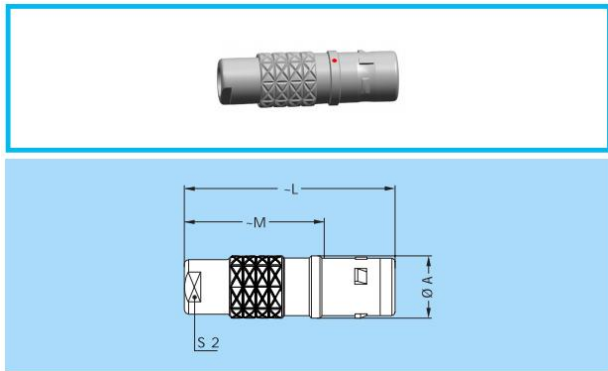
Fixed socket:

BLC 3KGHEGC10K = BLC 3K Series, key(G), female solder contacts, EG fixed socket, outer shell in white chrome-plated brass, multipole type with 10 contacts.

Sectional view

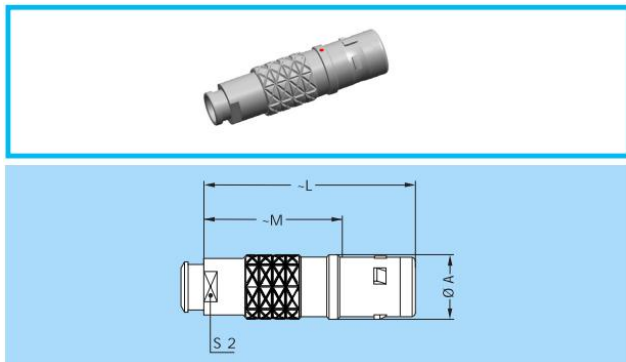


Metal housing models



FG Straight plug, key(G) or keys(A...F,L), cable collet

Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
FG	0K	11	34	23.0	8
FG	1K	13	42	28.0	9
FG	2K	16	52	36.0	12
FG	3K	19	61	41.0	15

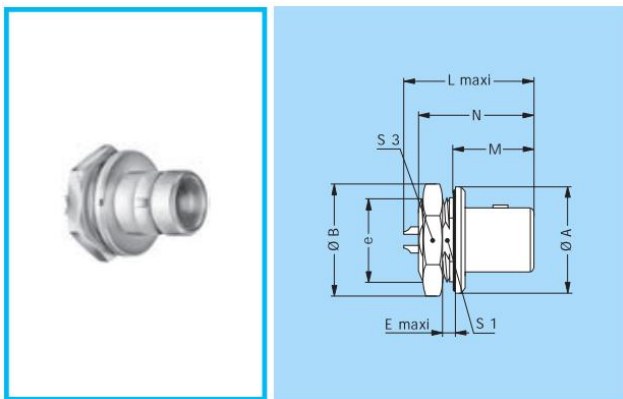


FG Straight plug, key(G) or keys(A ...F,L), cable collet and nut for fitting a bend relief 1)

Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
FG	0K	11	34	23.0	7
FG	1K	13	42	28.0	9
FG	2K	16	52	36.0	12
FG	3K	19	61	40.0	15

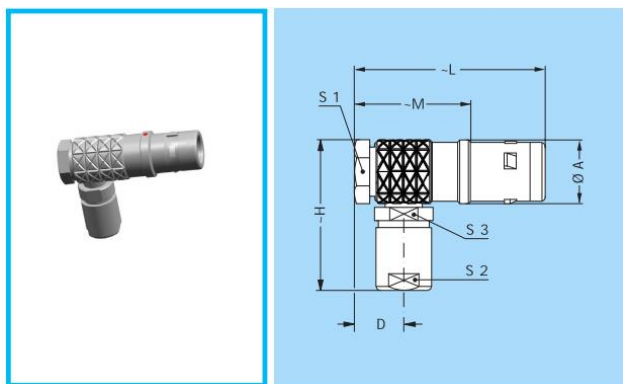
Note: 1)to order, adding a "Z" at the end of the reference.

The bend relief must be ordered separately (see page 33).



FA Fixed plug, nut fixing, non-latching, key(G) or keys(A...F,L)

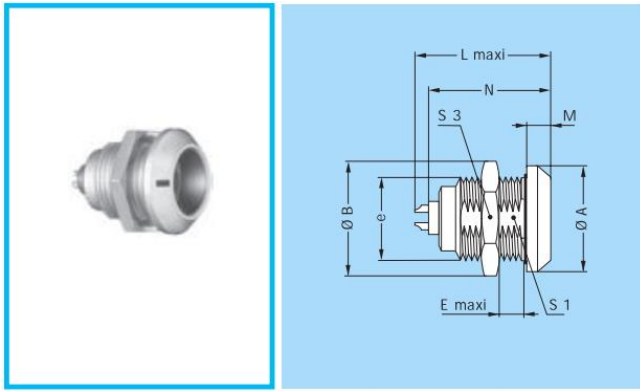
Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N	S1	S3
FA	1K	20	21.5	M16x1.0	2.3	22.6	16.0	22.5	14.5	19
FA	2K	25	27.0	M20x1.0	4.5	28.2	18.0	28.3	18.5	24
FA	3K	31	34.0	M24x1.0	4.0	34.3	22.5	33.8	22.5	30



FH Elbow 90°plug, key(G) or keys(A...F,L), cable collet

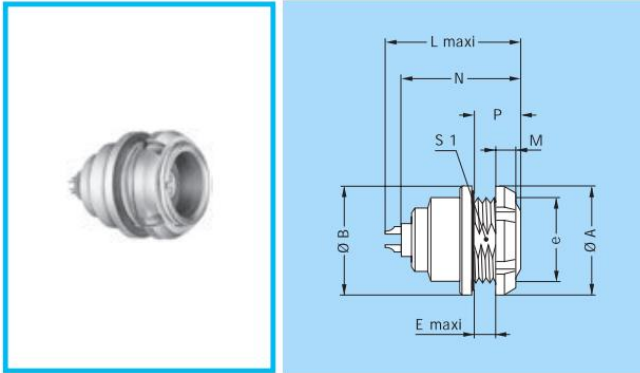
Reference		Dimensions (mm)							
Model	Series	A	D	H	L	M	S1	S2	S3
FH	0K	11.5	7.6	27	36	25.0	10	8	8
FH	1K	14.0	8.8	33	43	29.0	12	9	10
FH	2K	17.5	10.5	40	51	35.0	15	12	13
FH	3K	21.0	11.5	47	60	40.0	18	15	15

Note: all dimensions are in mm



EG Fixed socket, nut fixing, key(G) or keys(A ...F,L)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N	S1	S3
EG	0K	18	19.2	M14x1.0	6	21.7	4.0	20.1	12.5	17
EG	1K	20	21.5	M16x1.0	9	27.0	4.5	25.1	14.5	19
EG	2K	25	27.0	M20x1.0	9	30.7	5.0	28.6	18.5	24
EG	3K	31	34.0	M24x1.0	11	36.2	6.0	33.6	22.5	30



EE Fixed socket, nut fixing, key(G) or keys(A...F,L) (back panel mounting)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N	P	S1
EE	0K	18.0	18	M14x1.0	3.4	21.7	3.5	20.1	7.0	12.5
EE	1K	20.0	20	M16x1.0	6.2	27.0	3.5	25.1	10.0	14.5
EE	2K	25.0	25	M20x1.0	5.0	30.7	3.5	28.6	10.0	18.5
EE	3K	30.0	31	M24x1.0	7.5	36.2	4.5	33.6	12.0	22.5

EE Fixed socket, nut fixing, key(G) or keys(A...F and L) with straight print contacts for printed circuit(back panel mounting)

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	M	N	P	S1
EE	0K	18.0	18	M14x1.0	3.4	3.5	17.6	7.0	12.5
EE	1K	20.0	20	M16x1.0	6.2	3.5	23.8	10.0	14.5
EE	2K	25.0	25	M20x1.0	5.0	3.5	25.8	10.0	18.5
EE	3K	30.0	31	M24x1.0	7.5	4.5	31.3	12.0	22.5

Note: this contact type is available for E● socket models fitted with female contact.

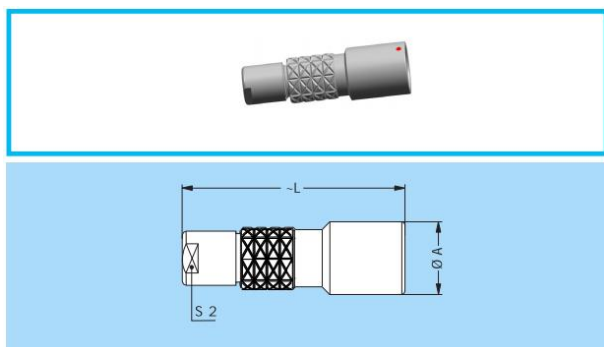
Length "L" depends on the number of contact, PCB drilling pattern see page 35.

EE Fixed socket, nut fixing, key(G) or keys(A...F and R), with elbow 90° contacts for printed circuit(back panel mounting)

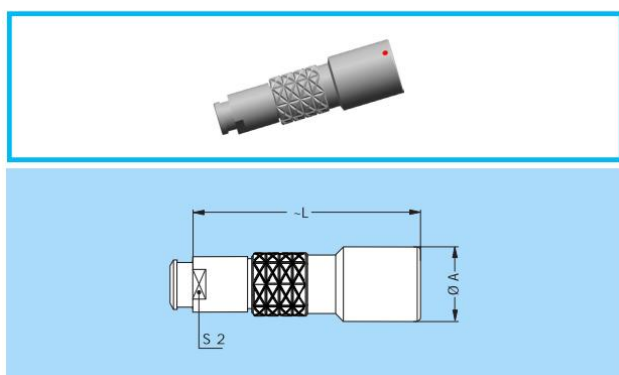
Reference		Dimensions (mm)							
Model	Series	A	B	e	E	M	N	P	S1
EE	0K	18	18	M14x1.0	3.4	3.5	9.3	7	12.5
EE	1K	20	20	M16x1.0	6.2	3.5	24.3	10	4.5
EE	2K	25	25	M20x1.0	5.0	3.5	26.6	10	8.5
EE	3K	30	31	M24x1.0	7.5	4.5	31.3	12	22.5

Note: Length "L" depends on the number of contact, PCB drilling pattern see page 37.

Note: all dimensions are in mm

**PH** Free socket, key(G) or keys(A...F,L), cable collet

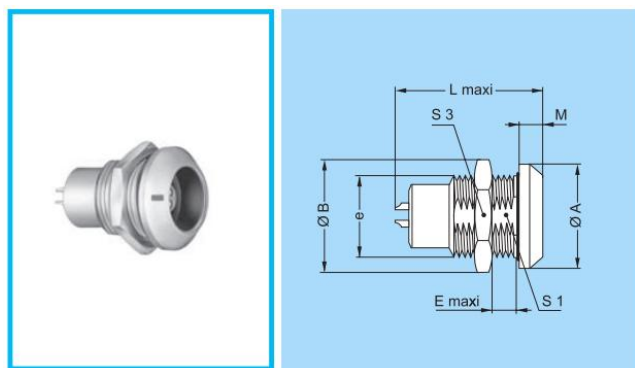
Reference		Dimensions (mm)		
Model	Series	A	L	S2
PH	0K	13	34.0	8
PH	1K	15	45.0	9
PH	2K	19	54.0	12
PH	3K	23	65.0	15

**PH** Free socket, key(G) or keys(A...F,L), cable collet and nut for fitting a bend relief 1)

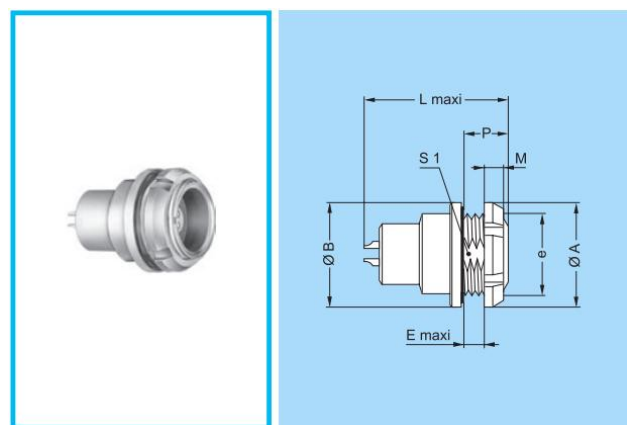
Reference		Dimensions (mm)		
Model	Series	A	L	S2
PH	0K	13	34.0	7
PH	1K	15	45.0	9
PH	2K	19	54.0	12
PH	3K	23	64.0	15

Note: 1) to order, add a "Z" at the end of the reference.

The bend relief must be ordered separately (see page 33).

**HG** Fixed socket, nut fixing, key(G) or keys(A...F and L), watertight or vacuumtight

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	S1	S3
HG	0K	18	19.2	M14x1.0	5.5	23.0	4.0	12.5	17
HG	1K	20	21.5	M16x1.0	9.0	30.0	4.5	14.5	19
HG	2K	25	27.0	M20x1.0	13.0	33.7	5.0	18.5	24
HG	3K	31	34.0	M24x1.0	16.0	41.7	6.0	22.5	30

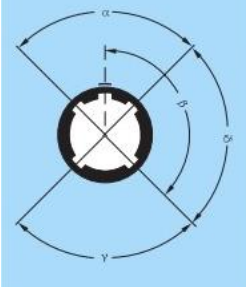
**HE** Fixed socket, nut fixing, key(G) or keys(A...F and L), watertight or vacuumtight (back panel mounting)

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	P	S1
HE	0K	18	18	M14x1.0	2.4	23.0	3.5	7	12.5
HE	1K	20	20	M16x1.0	6.2	30.0	3.5	10	14.5
HE	2K	25	25	M20x1.0	5.0	33.7	3.5	10	18.5
HE	3K	31	31	M24x1.0	7.5	41.7	4.5	12	22.5

Note: all dimensions are in mm

Alignment Key and Polarized Keying System

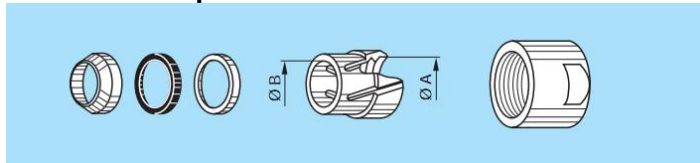
K series connector model part numbers are composed of two letters. The last letter indicates the key position and the contact type (male or female).

Front view of a socket	Ref.	Nb of keys	Angles	Series				Contact type		Note
				0K	1K	2K	3K	Plug	Socket	
	G	1		0°	0°	0°	0°	male	female	●
	A	2	α	30°	30°	30°	30°	male	female	●
	B	2		45°	45°	45°	45°	male	female	●
	C	2		60°	60°	60°	60°	male	female	●
	D	2	γ	95°	95°	95°	95°	male	female	○
	E	2	β	120°	120°	120°	120°	male	female	○
	F	2		145°	145°	145°	145°	male	female	○
	L	2	γ	75°	75°	75°	75°	female	male	●

● First choice alternative

○ Special order alternative

Suitable for K series wire clamps



	number encode	Wire clips Ø		Cable diameter Ø		remark
		ØA	ØB	min	max	
0K	30	3.1	-	2.6	3.0	
	35	4.2	4.2	3.1	3.5	
	40	4.2	4.2	3.6	4.0	
	45	5.2	5.2	4.1	4.5	
	50	5.2	5.2	4.6	5.0	
1K	40	4.2	-	3.6	4.0	
	45	5.2	-	4.1	4.5	
	50	5.2	-	4.6	5.0	
	55	6.2	6.2	5.1	5.5	
	60	6.2	6.2	5.6	6.0	
	65	7.2	6.7	6.1	6.5	
	70	7.2	-	6.6	7.0	
2K	50	5.2	-	4.6	5.0	
	55	6.2	-	5.1	5.5	
	60	6.2	-	5.6	6.0	
	65	7.2	-	6.1	6.5	
	70	7.2	-	6.6	7.0	
	75	8.2	8.2	7.1	7.5	
	80	8.2	8.2	7.6	8.0	
3K	85	9.2	8.6	8.1	8.5	
	90	9.2	9.0	8.6	9.0	
	60	6.2	-	5.6	6.0	
	65	7.2	-	6.1	6.5	
	70	7.2	-	6.6	7.0	
	75	8.2	-	7.1	7.5	
	80	8.2	-	7.6	8.0	
	85	9.2	-	8.1	8.5	
	90	9.2	-	8.6	9.0	
	95	10.2	10.2	9.1	9.5	
	10	10.2	10.2	9.6	10.0	
	11	11.2	10.6	10.1	10.5	

T Series

T Series Technical Characteristics

- Temperature range: -55°C ~ $+125^{\circ}\text{C}$;
- Humidity: 90%-95%($40\pm 2^{\circ}\text{C}$);
- Air pressure range: 4.39KPa~ 101.33KPa;
- Resistance to vibrations: 10Hz~2000Hz,
Accelerated speed 147m/s^2 , Instant break $\leq 1\mu\text{s}$;
- Impulse: 980m/s^2 , Instant break $\leq 1\mu\text{s}$;
- Sealing: IP68 watertight, outdoor application;
- Salt spray corrosion test: 5%NaCl fog, 96H;
- Endurance: ≥ 5000 recycles;
- Insulation resistance: $5000\text{M}\Omega$ (normal temperature);



T SERIES

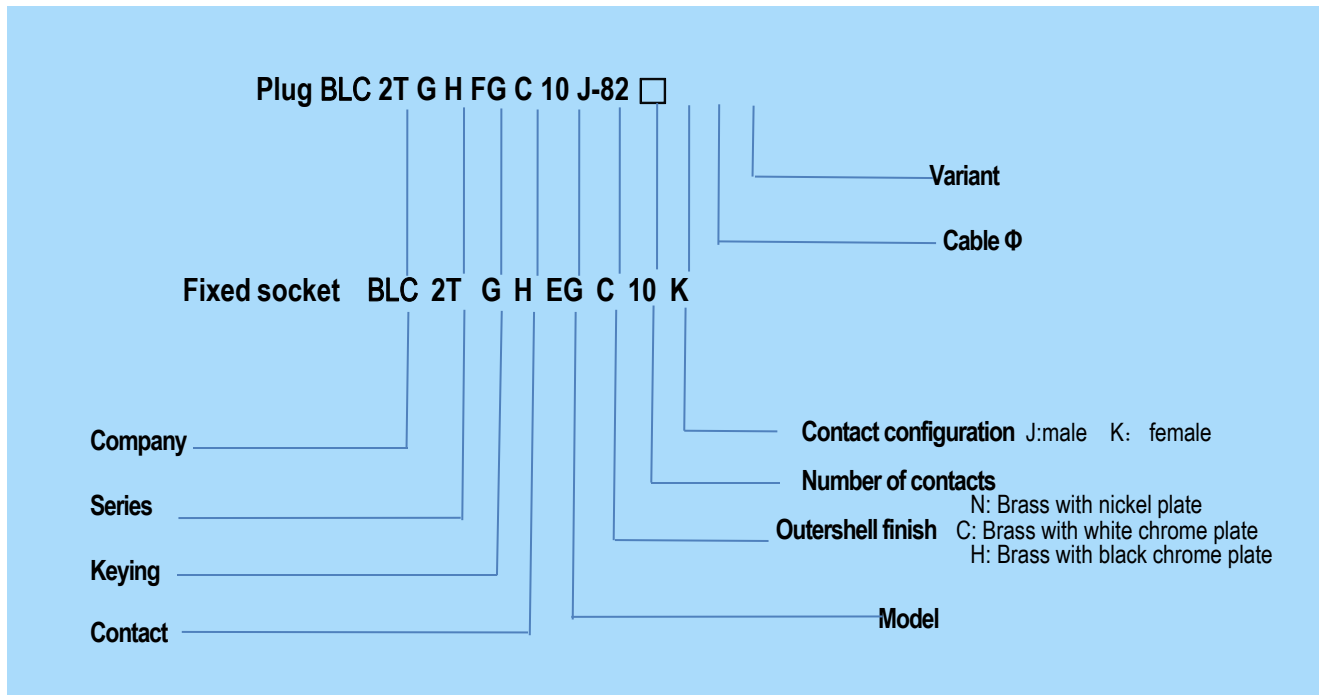
• Operation current & contact resistance :

Contact Ø (mm)	Contact resistance (mΩ)	Rated current(A)	Max cable size	
			mm ²	AWG
0.5	15	1	0.15	26
0.7	12.5	3	0.2	24
0.9	9	5	0.3	22
1.3	5	10	0.5	20
1.6	4	15	2.0	14
2.0	3.5	20	2.0	14
2.3	3	23	3.0	12
3	2.5	30	4.8	10

• Operation voltage & voltage resistance :

Shell No.	Number of contacts	Rated voltage: V		Voltage resistance: V	
		Sea level	Altitude 21336m	Sea level	Altitude 21336m
0T	02、03	250	125	875	225
	04、05、06、07、09	200	100	750	175
1T	02、03	300	150	1000	250
	04、05、06、07、08	250	125	875	225
	10、12、14、16	200	100	750	175
2T	02、03、04、05、06、07、08、10	300	150	1000	250
	12、14、16	250	125	875	225
	18、19、26、32	200	100	750	175
3T	02、03、04、05、06	300	150	1000	250
	07、08、09、10、12、14、16、18	250	125	875	225
	20、22、24、26、30	200	100	750	175

Part numbering system



Part numbering system example

Straight plug with key(G) and cable collet :

BLC 2TGHFGC10J-82 = BLC 2T series, keying(G), male solder contacts, FG straight plug, outershell in white chrome-plated brass, multipole type with 10 contacts, collet for Ø 8.0mm cable, and collet nut.

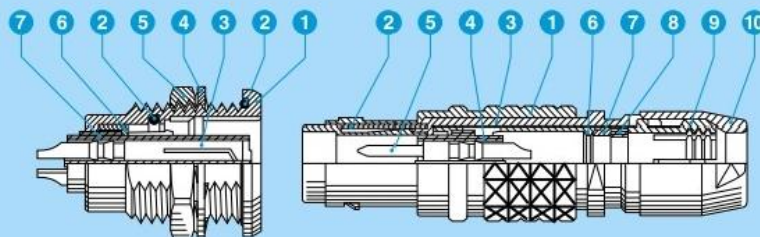
Fixed socket, nut fixing, with key(G) :

BLC 2TGHEGC10K = BLC 2T series, keying(G), female solder contacts, EG fixed socket, outershell in white chrome-plated brass, multipole type with 10 contact.

Sectional view

Fixed socket

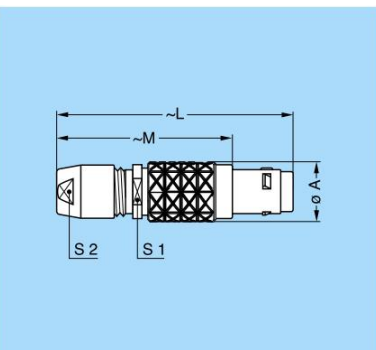
- 1 Outer shell
- 2 O-ring
- 3 Female contact
- 4 Locking washer
- 5 Hexagonal nut
- 6 Earthing crown
- 7 Insulator



Straight plug

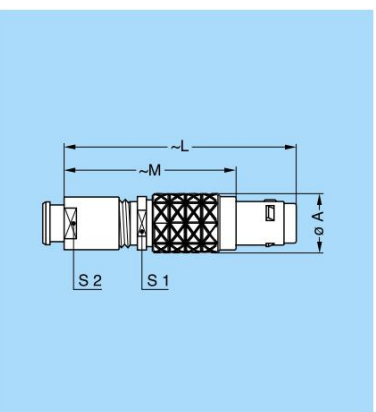
- 1 Outer shell
- 2 Latch sleeve
- 3 Inner shell
- 4 Insulator
- 5 Male contact
- 6 Split insert carrier
- 7 Earthing cone
- 8 Gasket
- 9 Collet + washer
- 10 Collet nut

Metal housing models



FG Straight plug, key(G) or keys(A...L And J), cable collet

Reference		Dimensions(mm)				
Model	Series	A	L	M	S1	S2
FG	0T	9.5	39.0	29.0	7.5	7
FG	1T	12.0	46.0	35.0	11.0	9
FG	2T	15.0	55.0	43.0	14.0	12
FG	3T	18.8	64.0	49.0	16.0	14

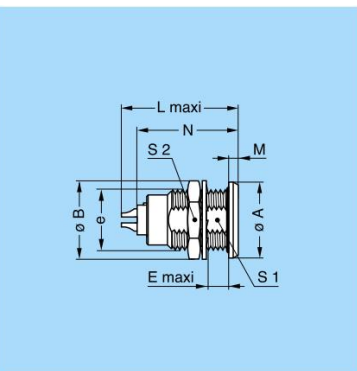


FG Straight plug, key(G) or keys(A...L and J), cable collet and nut for fitting a bend Relief 1)

Reference		Dimensions(mm)				
Model	Series	A	L	M	S1	S2
FG	0T	9.5	38.0	28.0	7.5	7
FG	1T	12.0	45.0	34.0	11.0	9
FG	2T	15.0	54.0	42.0	14.0	12
FG	3T	18.8	62.0	47.0	16.0	14

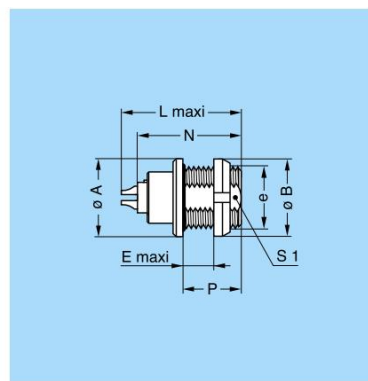
Note: 1)to order, add a "Z"

The bend relief must be ordered separately (see page 33).



EG Fixed socket, nut fixing, key(G) or keys(A...L and J)

Reference		Dimensions(mm)								
Model	Series	A	B	e	E	L	M	N	S1	S2
EG	0T	12.0	12.5	M9x0.6	6.0	21.0	1.5	19.1	8.2	11
EG	1T	15.5	16.0	M12x1.0	6.0	23.0	1.8	21.5	10.5	14
EG	2T	18.5	19.6	M15x1.0	7.5	26.5	1.8	24.6	13.5	17
EG	3T	23.5	25.1	M18x1.0	9.6	30.1	2.5	25.0	16.5	22



EE Fixed socket, nut fixing, key(G) or keys (A ...L and J)

Reference		Dimensions(mm)								
Model	Series	A	B	e	E	L	N	P	S1	
EE	0T	12.0	12.0	M9x0.6	6.5	21.0	19.1	7	8.2	
EE	1T	15.5	16.0	M12x1.0	6.5	23.0	21.5	9	10.5	
EE	2T	18.5	19.6	M15x1.0	7.5	26.5	24.6	11	13.5	
EE	3T	23.5	24.0	M18x1.0	7.5	30.1	25.0	12	16.5	

Note: all dimensions are in mm

Alignment Key

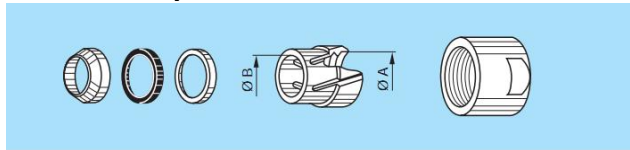
T series connector model part numbers are composed of two letters. The LAST LETTER indicates the key position and contact type (male or female).

Front view of a socket		Ref.	Nb of keys	Angles	Series		Ref.	Nb of keys	Angles	Series		Contact type		Note
					0B	1B				2B	3B	Plug	Socket	
		G	1		0°	0°	G	1		0°	0°	male	female	●
		A	2	α	30°	30°	A	2	α	30°	30°	male	female	●
		B	2		60°	60°	B	2		45°	45°	male	female	●
		C	2		90°	90°	C	2		60°	60°	male	female	●
		D	2	β	135°	135°	D	2	β	95°	95°	male	female	○
		E	2		145°	145°	E	2		120°	120°	male	female	○
		F	2		155°	155°	F	2		145°	145°	male	female	○
		J	2	γ	45°	45°	J	2	α	37.5°	37.5°	female	male	●
		K	2		70°	70°	K	2		52.5°	52.5°	female	male	○
		L	2		80°	80°	L	2		70°	70°	female	male	○

● First choice alternative

○ Special order alternative

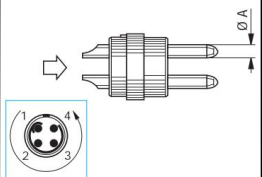
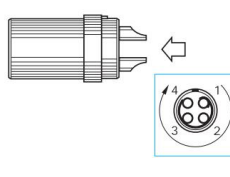
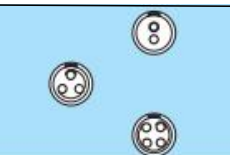
Suitable for T series wire clamps



	number encode	Wire clips Ø		Cable diameter Ø		remark
		ØA	ØB	min	max	
0T	30	3.1	-	2.6	3.0	
	35	4.2	4.2	3.1	3.5	
	40	4.2	4.2	3.6	4.0	
	45	5.2	5.2	4.1	4.5	
1T	50	5.2	5.2	4.6	5.0	
	40	4.2	-	3.6	4.0	
	45	5.2	-	4.1	4.5	
	50	5.2	-	4.6	5.0	
	55	6.2	6.2	5.1	5.5	
	60	6.2	6.2	5.6	6.0	
2T	65	7.2	6.7	6.1	6.5	
	70	7.2	-	6.6	7.0	
	50	5.2	-	4.6	5.0	
	55	6.2	-	5.1	5.5	
	60	6.2	-	5.6	6.0	
	65	7.2	-	6.1	6.5	
	70	7.2	-	6.6	7.0	
	75	8.2	8.2	7.1	7.5	
3T	80	8.2	8.2	7.6	8.0	
	85	9.2	8.6	8.1	8.5	
	90	9.2	9.0	8.6	9.0	
	60	6.2	-	5.6	6.0	
	65	7.2	-	6.1	6.5	
	70	7.2	-	6.6	7.0	
	75	8.2	-	7.1	7.5	
	80	8.2	-	7.6	8.0	
	85	9.2	-	8.1	8.5	
	90	9.2	-	8.6	9.0	
	95	10.2	10.2	9.1	9.5	
	10	10.2	10.2	9.6	10.0	
	11	11.2	10.6	10.1	10.5	

Insert configuration

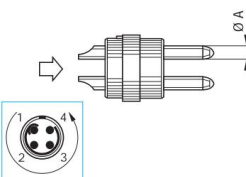
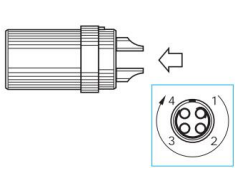
Multipole

		Male solder contact	Female solder contact	Reference	Number of contacts	Contact Ø	Solder bucket Ø (mm)	Contact type		
								Solder	Print (straight)	Print (elbow)
00			02	2	0.5	0.45	●	●	●	
			03	3	0.5	0.45	●	●	●	
			04	4	0.5	0.45	●	●	●	
0B 0K 0T			02	2	0.9	0.9	●	●	●	
			03	3	0.9	0.9	●	●	●	
			04	4	0.7	0.7	●	●	●	
			05	5	0.7	0.7	●	●	●	
			06	6	0.5	0.45	●	●	●	
			07	7	0.5	0.45	●	●	●	
			09	9	0.5	0.45	●	●	○	
1B 1K 1T			02	2	1.3	1.3	●	●	●	
			03	3	1.3	1.3	●	●	●	
			04	4	0.9	0.9	●	●	●	
			05	5	0.9	0.9	●	●	●	
			06	6	0.7	0.7	●	●	●	
			07	7	0.7	0.7	●	●	●	
			08	8	0.7	0.7	●	●	●	
			10	10	0.5	0.45	●	●	●	
			14	14	0.5	0.45	●	●	●	
			16	16	0.5	0.45	●	●	○	

● First choice alternative

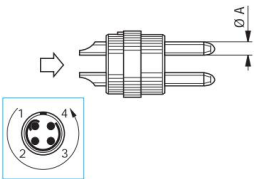
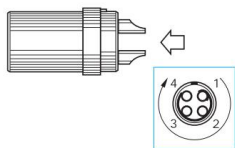
○ Special order alternative

2B
2K
2T

	Male solder contact	Female solder contact	Reference	Number of contacts	Contact Ø	Solder bucket Ø (mm)	Contact type		
							Solder	Print (straight)	Print (elbow)
			02	2	2.0	1.8	●	●	●
			03	3	1.6	1.5	●	●	●
			04	4	1.3	1.3	●	●	●
			05	5	1.3	1.3	●	●	●
			06	6	1.3	1.3	●	●	●
			07	7	1.3	1.3	●	●	●
			08	8	0.9	0.9	●	●	●
			10	10	0.9	0.9	●	●	●
			12	12	0.7	0.7	●	●	●
			14	14	0.7	0.7	●	●	●
			16	16	0.7	0.7	●	●	●
			18	18	0.7	0.7	●	●	●
			19	19	0.7	0.7	●	●	●
			26	26	0.5	0.45	●	●	○
			32	32	0.5	0.45	●	●	○

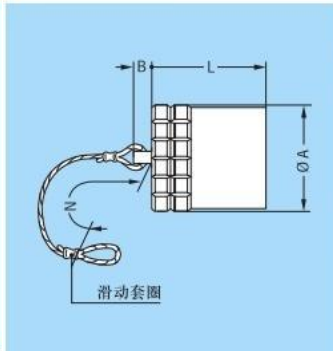
- First choice alternative
- Special order alternative

3B
3K
3T

Male solder contact		Female solder contact	
			

- First choice alternative
○ Special order alternative

Accessories



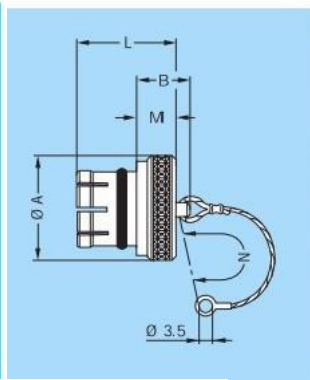
BFG Plug caps with key(G)

Part number	Series	Dimensions(mm)			
		A	B	L	N
BFG.0K.100.NAS	0K	14.0	6	12.5	85
BFG.1K.100.NAS	1K	16.0	6	15.5	85
BFG.2K.100.NAS	2K	19.5	6	17.5	85
BFG.3K.100.NAS	3K	23.0	6	22.0	120

Note: This cap is available only with an alignment key(G).

The last letter "S" of the part number stands for material of the o-ring (silicone rubber).

Shell material: Chrome-plated brass
Lanyard material: Stainless steel
O-ring material: Silicone rubber
Max operating temperature: 135°C
Watertightness: IP67 for T and K series.

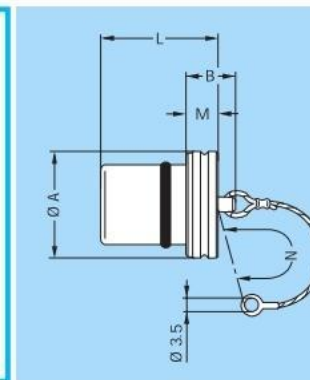


BRE Blanking caps for fixed sockets and free sockets

Part number	Series	Dimensions(mm)				
		A	B	L	M	N
BRE.00.200.NAS	00	8	7.5	8.8	3.5	60
BRE.0B.200.NAS	0B	10	9.5	10.5	4.5	85
BRE.1B.200.NAS	1B	14	11.0	12.5	5.0	85
BRE.2B.200.NAS	2B	18	12.0	14.0	6.0	85
BRE.3B.200.NAS	3B	22	14.0	18.0	8.0	120

Note: These caps are suitable for use with any alignment key configuration.
The last letter "S" of the part number stands for o-ring material (silicone rubber).

Shell material: Chrome-plated brass
Lanyard material: Stainless steel
O-ring material: Silicone rubber
Max operating temperature: 135°C
Watertightness: IP61



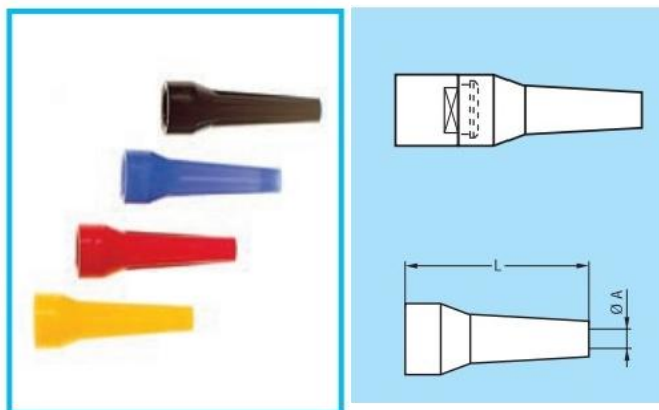
BRE Blanking caps for fixed sockets and free sockets

Part number	Series	Dimensions(mm)				
		A	B	L	M	N
BRE.0K.200.NAS	0K	15.0	10	15.0	4	85
BRE.1K.200.NAS	1K	17.0	12	20.0	6	85
BRE.2K.200.NAS	2K	20.5	14	24.0	8	85
BRE.3K.200.NAS	3K	24.0	14	28.0	8	120

Note: These caps are suitable for use with any alignment key configuration.
The last letter "S" of the part number stands for o-ring material (silicone rubber).

Shell material: Chrome-plated brass
Lanyard material: Stainless steel
O-ring material: Silicone rubber
Max operating temperature: 135°C
Watertightness: IP67 for T and K series.

Note: all dimensions are in mm



GM• Bend relief(TPU)

A bend relief made from TPU (Desmopan 786) can be fitted over BLC plugs and sockets that are supplied without for fitting such bend relief.

They are available in nine colors.

Use the part numbers shown below to order this accessories



Main characteristics

- Material: TPU (Thermoplastic Polyurethane)
- Temperature range in dry atmosphere: -40°C ~+80°C

Part number	Dimensions(mm)			
	Bend relief		Cable ø	
	A	L	max	min
GMA.00.012.DG	1.2	22	1.4	1.1
GMA.00.018.DG	1.8	22	2.1	1.8
GMB.00.025.DG	2.5	22	2.8	2.5
GMB.00.028.DG	2.8	22	3.1	2.8
GMB.00.032.DG	3.2	22	3.5	3.2
GMD.00.025.DG	2.5	22	2.8	2.5
GMD.00.028.DG	2.8	22	3.1	2.8
GMD.00.032.DG	3.2	22	3.5	3.2
GMA.0B.025.DG	2.5	24	2.9	2.5
GMA.0B.030.DG	3.0	24	3.4	3.0
GMA.0B.035.DG	3.5	24	3.9	3.5
GMA.0B.040.DG	4.0	24	4.4	4.0
GMA.0B.045.DG	4.5	24	5.2	4.5
GMA.1B.025.DG	2.5	30	2.9	2.5
GMA.1B.030.DG	3.0	30	3.4	3.0
GMA.1B.035.DG	3.5	30	3.9	3.5
GMA.1B.040.DG	4.0	30	4.4	4.0
GMA.1B.045.DG	4.5	30	4.9	4.5
GMA.1B.054.DG	5.4	30	6.0	5.4
GMA.1B.065.DG	6.5	30	7.0	6.5
GMA.2B.040.DG	4.0	36	4.5	4.0
GMA.2B.045.DG	4.5	36	5.0	4.5
GMA.2B.050.DG	5.0	36	5.5	5.0
GMA.2B.060.DG	6.0	36	6.5	6.0
GMA.2B.070.DG	7.0	36	7.7	7.0
GMA.2B.080.DG	7.8	36	8.8	7.8
GMA.3B.050.DG	4.5	42	5.2	4.5
GMA.3B.060.DG	6.0	42	6.9	6.0
GMA.3B.070.DG	7.0	42	7.9	7.0
GMA.3B.080.DG	8.0	42	8.9	8.0
GMA.3B.090.DG	9.0	42	10.0	9.0

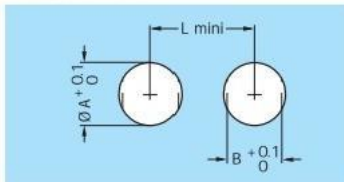
Note: The last letter "G" of the part number indicates the grey color of the bend relief. For ordering a bend relief with another color, see "color match" table and replace the letter "G" by the letter of the required color.

Note: all dimensions are in mm

Color match

Ref.	Color
A	Blue
B	White
G	Grey
J	Yellow
M	Brown
N	Black
R	Red
S	Orange
V	Green

Panel cut-outs



B Series

Series	ØA	B	L
00	7.1	6.4	12.5
0B	9.1	8.3	14.5
1B	12.1	10.6	18.5
2B	15.1	13.6	22.5
3B	18.2	16.6	27.0

K Series

Series	ØA	B	L
0K	14.1	12.6	20.5
1K	16.1	14.6	22.5
2K	20.2	18.6	29.0
3K	24.2	22.6	35.5

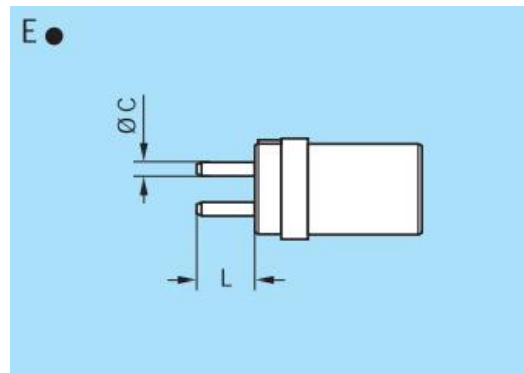
T Series

Series	ØA	B	L
0T	9.1	8.3	14.5
1T	12.1	10.6	18.5
2T	15.1	13.6	22.5
3T	18.2	16.6	27.0

Length of straight print contacts

(E • Socket)

	Type	Dimensions	
		ØC	L
00	02	0.5	3.0
	03	0.5	3.0
	04	0.5	3.0
0B 0K 0T	02/03	0.7	3.2
	04/05	0.5	3.2
	06/07/09	0.5	3.2
1B 1K 1T	02/03/04/05	0.7	3.0
	06/07/08	0.7	3.0
	10/14/16	0.5	4.0
2B 2K 2T	02/03/04/05/06/07	0.7	3.0
	03/10/12/14/16/18/19	0.7	3.0
	26/32	0.5	3.0
3B 3K 3T	02/03/04/05/06/07	0.7	3.0
	08/09/10/12/14/16/18	0.7	3.0
	20/22/24/26/30	0.5	5.0

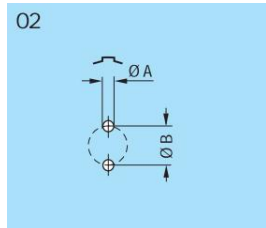


E • Socket

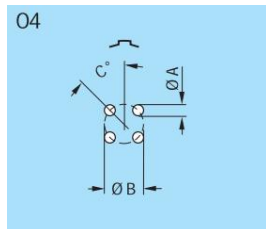
Note: all dimensions are in mm

PCB drilling pattern

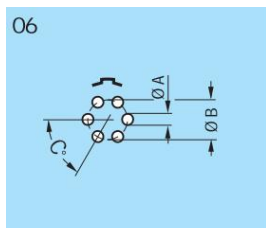
Fixed socket with straight print contact(B-K-T Series)



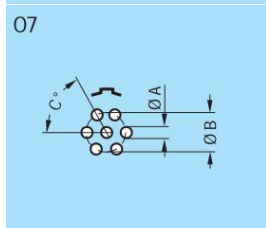
Series	Dimensions(mm)	
	A	B
00	0.6	1.2
0B-0K-0T	0.8	2.2
1B-1K-1T	0.8	2.8
2B-2K-2T	0.8	4.4



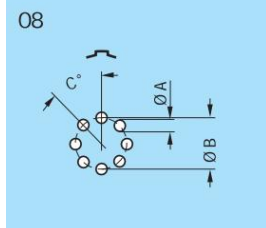
Series	Dimensions(mm)		
	A	B	C
00	0.6	1.6	45°
0B-0K-0T	0.6	2.5	45°
1B-1K-1T	0.8	3.1	45°
2B-2K-2T	0.8	5.0	45°
3B-3K-3T	0.8	6.2	45°



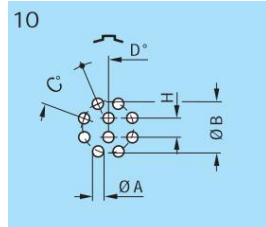
Series	Dimensions(mm)		
	A	B	C
0B-0K-0T	0.6	3.0	60°
1B-1K-1T	0.8	3.7	60°



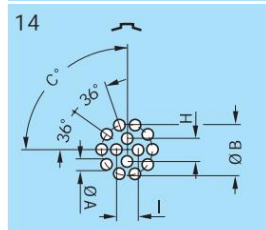
Series	Dimensions(mm)		
	A	B	C
0B-0K-0T	0.6	3.00	60°
1B-1K-1T	0.8	3.70	60°
2B-2K-2T	0.8	5.80	60°
3B-3K-3T	0.8	7.08	60°



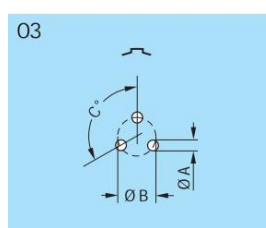
Series	Dimensions(mm)		
	A	B	C
2B-2K-2T	0.8	6.4	45°
3B-3K-3T	0.8	7.5	45°



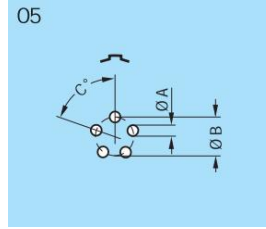
Series	Dimensions(mm)				
	A	B	C	D	H
1B-1K-1T	0.6	3.95	45°	22°30'	1.40
2B-2K-2T	0.8	6.20	45°	22°30'	2.15
3B-3K-3T	0.8	7.90	45°	22°30'	2.80



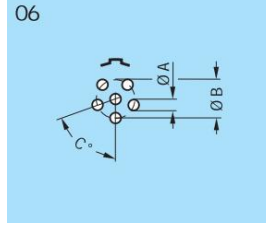
Series	Dimensions(mm)				
	A	B	C	H	I
1B-1K-1T	0.6	4.4	90°	1.90	1.80
2B-2K-2T	0.8	6.5	90°	2.65	2.65
3B-3K-3T	0.8	8.2	90°	3.40	3.40



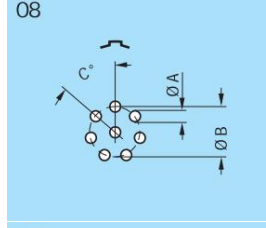
Series	Dimensions(mm)		
	A	B	C
00	0.6	1.35	120°
0B-0K-0T	0.8	2.30	120°
1B-1K-1T	0.8	3.00	120°
2B-2K-2T	0.8	4.60	120°
3B-3K-3T	0.8	5.60	120°



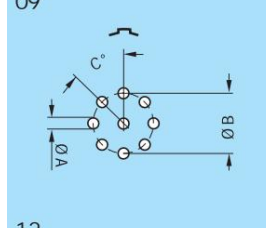
Series	Dimensions(mm)		
	A	B	C
0B-0K-0T	0.6	2.8	72°
1B-1K-1T	0.8	3.4	72°
2B-2K-2T	0.8	5.2	72°
3B-3K-3T	0.8	6.7	72°



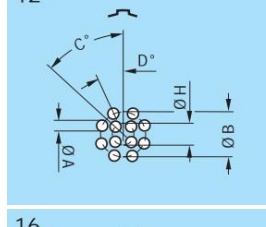
Series	Dimensions(mm)		
	A	B	C
2B-2K-2T	0.8	5.6	72°
3B-3K-3T	0.8	7.1	72°



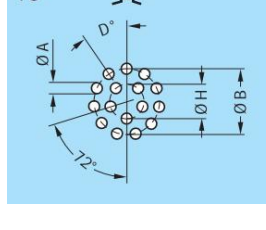
Series	Dimensions(mm)		
	A	B	C
1B-1K-1T	0.8	3.8	51°26'



Series	Dimensions(mm)		
	A	B	C
0B-0K-0T	0.6	3.2	45°
3B-3K-3T	0.8	7.5	45°

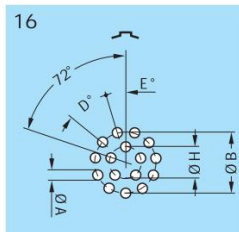


Series	Dimensions(mm)				
	A	B	C	D	H
2B-2K-2T	0.8	6.50	45°	22°30'	2.80
3B-3K-3T	0.8	8.20	45°	22°30'	3.40

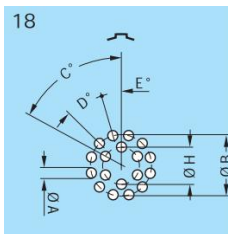


Series	Dimensions(mm)			
	A	B	D	H
1B-1K-1T	0.6	4.4	32°44'	2.00

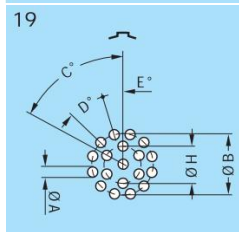
Note: all dimensions are in mm



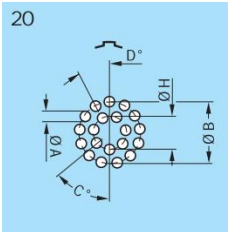
Series	Dimensions(mm)				
	A	B	D	E	H
2B-2K-2T	0.8	6.6	32°44'	16°22'	3.10
3B-3K-3T	0.8	8.4	32°44'	16°22'	3.86



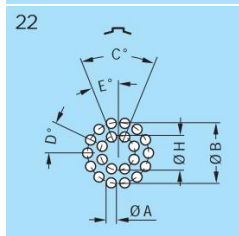
Series	Dimensions(mm)					
	A	B	C	D	E	H
2B-2K-2T	0.8	6.7	60°	30°	15°	3.50
3B-3K-3T	0.8	8.4	60°	30°	15°	4.34



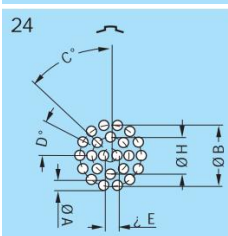
Series	Dimensions(mm)					
	A	B	C	D	E	H
2B-2K-2T	0.8	6.7	60°	30°	15°	3.5



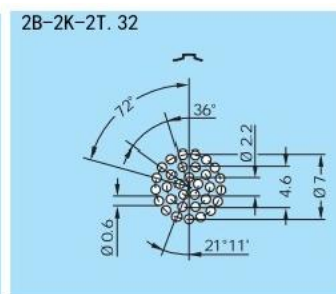
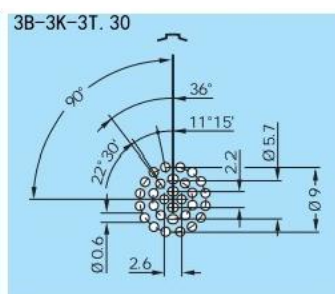
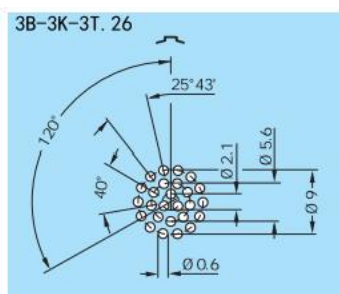
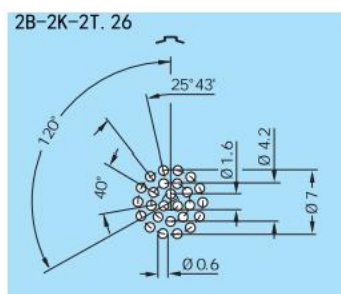
Series	Dimensions(mm)				
	A	B	C	D	H
3B-3K-3T	0.6	8.62	51°26'	27°42'	4.78



Series	Dimensions(mm)					
	A	B	C	D	E	H
3B-3K-3T	0.6	8.8	45°	25°43'	22°30'	5

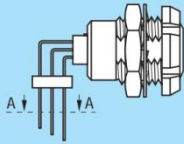


Series	Dimensions(mm)					
	A	B	C	D	E	H
3B-3K-3T	0.6	8.8	45°	25°43'	1.8	5.30

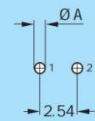


Note: All views are from the side of the socket.
All dimensions are in mm

Fixed socket with elbow print contact (B-K-T Series)

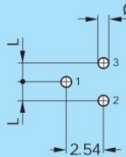


02



Series	Dimensions(mm)	
	A	
00	0.6	
0B-0K-0T	0.7	
1B-1K-1T	0.9	
2B-2K-2T	0.9	

03



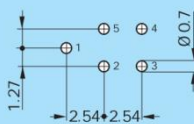
Series	Dimensions(mm)	
	A	L
00	0.6	1.27
0B-0K-0T	0.7	1.27
1B-1K-1T	0.9	1.27
2B-2K-2T	0.9	2.54

04

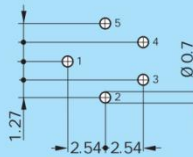


Series	Dimensions(mm)	
	A	L
00	0.6	2.54
0B-0K-0T	0.7	2.54
1B-1K-1T	0.7	2.54
2B-2K-2T	0.9	3.50

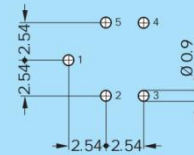
0B-0K-0T. 05



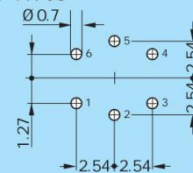
1B-1K-1T. 05



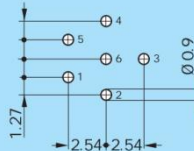
2B-2K-2T. 05



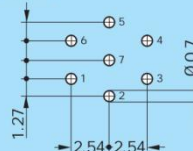
0B-0K-0T. 06
1B-1K-1T. 06



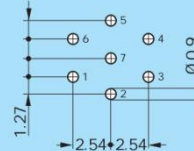
2B-2K-2T. 06



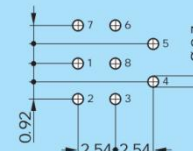
0B-0K-0T. 07
1B-1K-1T. 07



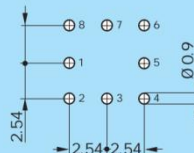
2B-2K-2T. 07



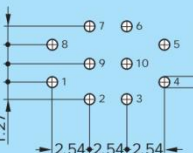
1B-1K-1T. 08



2B-2K-2T. 08
3B-3K-3T. 08



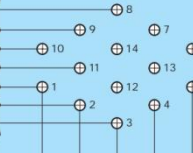
2B-2K-2T. 10
3B-3K-3T. 10



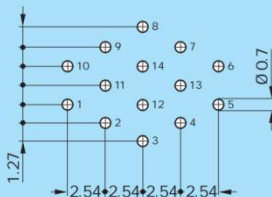
2B-2K-2T. 12
3B-3K-3T. 12



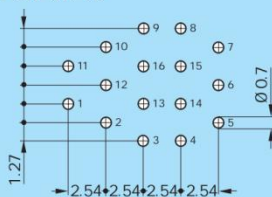
2B-2K-2T. 14
3B-3K-3T. 14



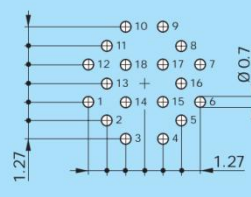
3B-3K-3T. 14



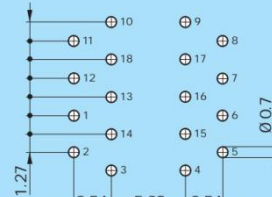
2B-2K-2T. 16
3B-3K-3T. 16



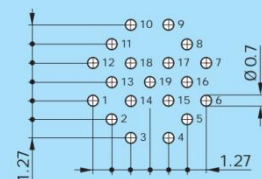
2B-2K-2T. 18



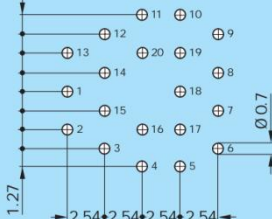
3B-3K-3T. 18



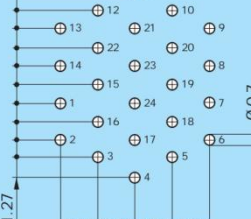
2B-2K-2T. 19



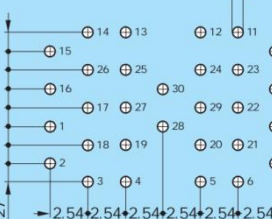
3B-3K-3T. 20



3B-3K-3T. 24



3B-3K-3T. 30



Note: all dimensions are in mm

TLU Series

TLU Series Technical Characteristics

- Temperature range: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- Humidity: 90%~95%($40 \pm 2^{\circ}\text{C}$)
- Resistance to vibrations: 10Hz~2000Hz,
Accelerated speed 147m/S^2 , Instant break $\leq 1\mu\text{s}$
- Shock test: 980m/S^2 , Instant break $\leq 1\mu\text{s}$
- Sealing: (Note: Some connectors do not apply to this characteristics)

equipment: pressure difference $1.01 \times 10^2 \text{Pa}$, lasting 1min without bubble leakage($0.2 \times 10^2 \text{pa}$ at flange)

matting: 2m water depth, 24h no leakage

- Salt spray corrosion test: 5%NaCl fog, 96H

- Endurance: ≥ 5000 recycles

- Insulation resistance:

Item	Work environment	Insulation resistance(M Ω)
1	Normal temperature status	≥ 5000
2	125°C	≥ 500
3	Humid status	≥ 50
4	Under water pressure	≥ 50

Dielectric voltage withstand:

Usage level	Sea level V、AC	21336m altitude V、AC
0	500	125
I	750	175
II	875	225
III	1000	250

Contact $\varnothing$, Contact resistance, Rated current, Solder cup $\varnothing$, Max cable AWG

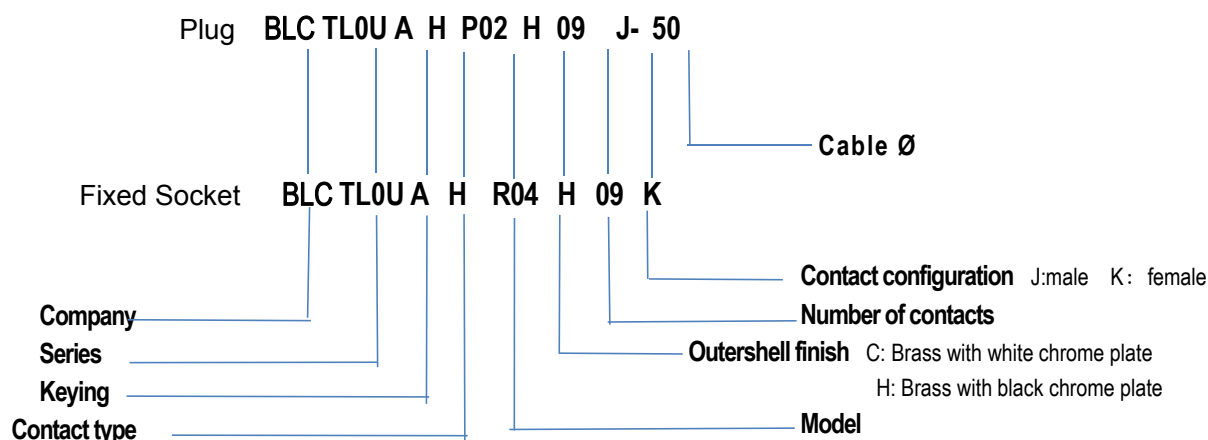
Contact $\varnothing$ (mm)	Contact resistance (m Ω)	Rated current (A)	Solder cup $\varnothing$ (mm)	Max cable size	
				mm ²	AWG
0.4	20	1	0.4	0.1	28
0.5	15	1.8	0.5	0.15	26
0.7	12.5	3.8	0.7	0.2	24
0.9	9	6.3	0.9	0.3	22
1.3	5	9	1.3	0.5	20
1.6	4	15	1.6	2.0	14
2.0	3.5	20	2.0	2.0	14
2.3	3	23	2.3	3.0	12
3.0	2.5	30	3.0	4.8	10

When multiple contacts work at the same time, their rated working current decline rate should comply with the following table:

Contacts numbers	1~10	11~20	21 ~ 30	31 ~ 62
Decline rate of rated working current %	0	10	20	30



Part numbering system



Item	Ref. feature	Ref. stands for	Code
1	Company	Company	BLC
2	Series	Series	TL0U、 TL1U、 TLAU、 TL2U、 TL3U
3	Keying	Keying	A、 B、 C、 D
4	Contact type	Solder	H
		Print (straight)	B
		Print (elbow)	W
5	Connector type	Plug type	P01...
		Socket type	R02、 R04...
6	Outer shell finish	White chrome-plated brass	C
		Black chrome-plated brass	H
7	Contact layout	Number of contacts	Number (+Letter)
8	Contact configuration	Male contact	J
		Female contact	K
9	Cable diameter	Cable collet size	-50,-55.

Part numbering system example

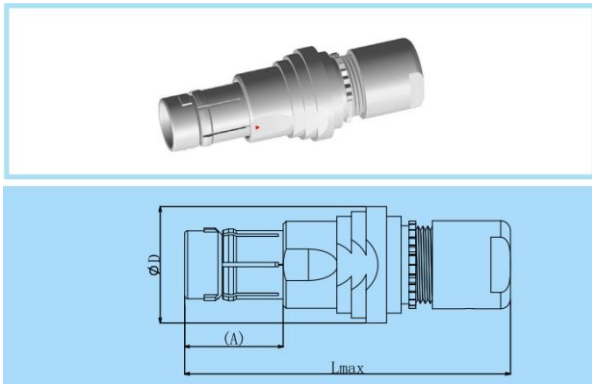
Straight plug

BLC TL0UBHP01H09J-50 = BLC TL0U series, keying B, male solder contacts, P01 straight plug, outershell in black chrome-plated brass, multipole type with 9 contacts, collet for Ø 4.2-5.0mm cable.

Fixed socket

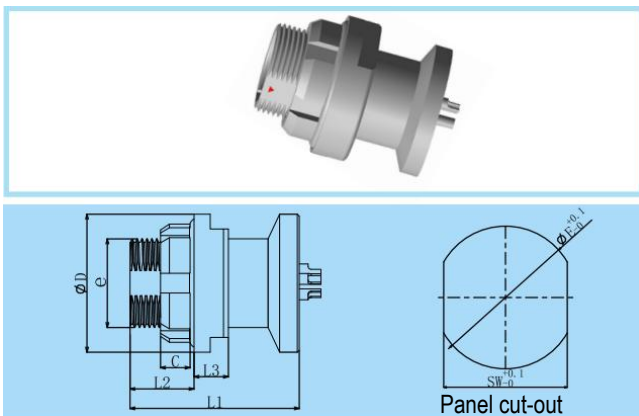
BLC TL0UBHR04H09K = BLC TL0U series, keying B, female solder contacts, R04 fixed socket, outershell in black chrome-plated brass, multipole type with 9 contacts.

Metal housing models



P01 Plug, D type

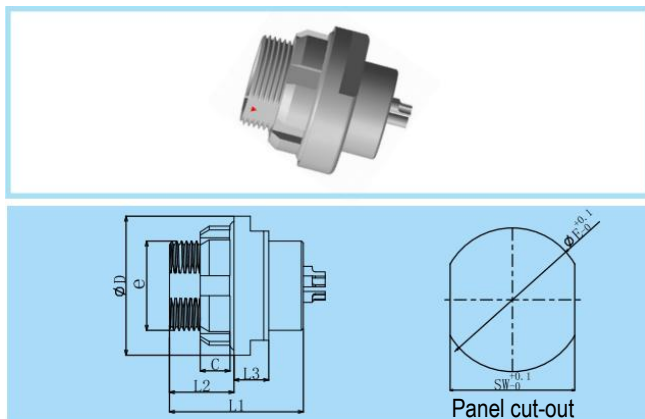
Reference		Dimensions (mm)		
Model	Series	L	A	D
P01	TL0U	34	10	11.9
P01	TL1U	39	11	15
P01	TLAU	38	13	15
P01	TL2U	40	12	18.5
P01	TL3U	52	15	19



R02 Socket, panel mounted

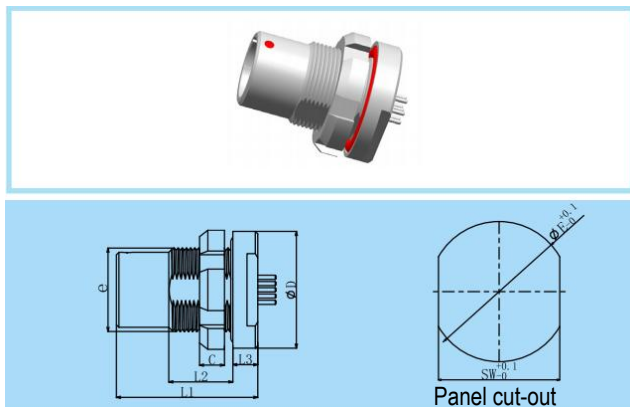
Reference		Dimensions (mm)								
Model	Series	L1	L2	L3	C	e	D	SW	E	
R02	TL0U	17.2	6.5	3.5	3	M9X0.5	14	8	9.1	
R02	TL1U	21	8	4	4	M14X1	18	12.1	14.1	
R02	TLAU	22.7	8	4	4	M16X1	22	14.5	16.1	*
R02	TL2U	22.5	8	4	5	M16X1	22	15.1	16.1	
R02	TL3U	26.5	10	4.5	5	M20X1	27	19.1	20.1	

Note: single side machining flat with *



R04 Socket, panel mounted

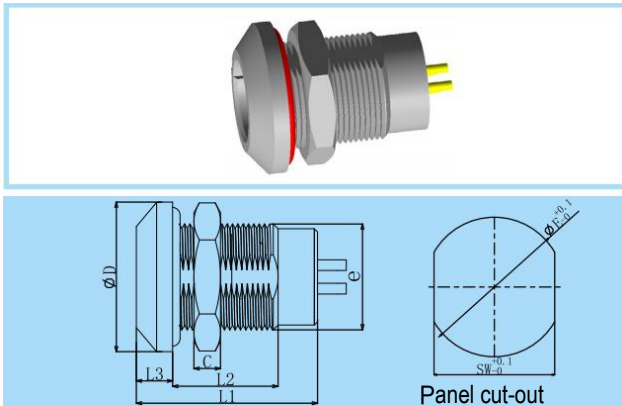
Reference		Dimensions (mm)								
Model	Series	L1	L2	L3	C	e	D	SW	E	
R04	TL0U	13.5	6.5	3.5	3	M9X0.5	14	8	9.1	
R04	TL1U	17	6.5	5	3.5	M12X1	16.4	10.1	12.1	
R04	TLAU	21	8	4	4	M16X1	22	14.5	16.1	



R07 Socket, panel mounted

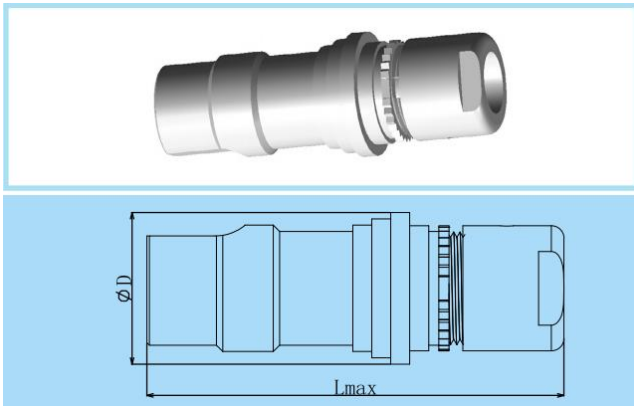
Reference		Dimensions (mm)								
Model	Series	L1	L2	L3	C	e	D	SW	E	
R07	TL0U	17	7.7	3	3	M10X0.5	14	9.2	10.1	
R07	TL1U	21	11	3	4	M14X1	18	12.6	14.1	
R07	TLAU	22.5	12	3	4	M16X1	22	14.5	16.1	
R07	TL2U	22.5	12	3	4	M18X1	22	16.1	18.1	

Note: all dimensions are in mm



R10 Socket, panel mounted

Reference		Dimensions (mm)							
Model	Series	L1	L2	L3	C	e	D	SW	E
R10	TL0U	17	10.1	3.4	2.5	M10X0.5	14	9.2	10.1
R10	TL2U	22.5	11.6	3.4	3.5	M18X1	22	16.1	18.1

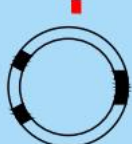
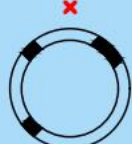
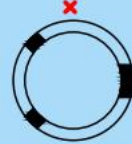


R50 Free socket, double-way, D type

Reference		Dimensions (mm)	
Model	Series	L	D
R50	TL0U	34	12
R50	TL1U	38	15

Note: all dimensions are in mm

Alignment Key

Shell Series	Ref.			
	A	B	C	D
TL0U				
TL1U				
TLAU				
TL2U				
TL3U				

Note: Front side view of socket

Contact configuration

Multipole

	solder male contact	solder female contact	Holes	contacts	contact ϕ_A (mm)	Use the grade
TLOU			02	2	0.9	II
			03	3	0.9	II
			04	4	0.7	I
			05	5	0.7	I
			07	7	0.5	I
			09	9	0.5	I
			12	12	0.4	0
			13	13	0.4	0
TL1U			02	2	1.3	III
			03	3	1.3	III
			04	4	0.9	II
			05	5	0.9	II
			06	6	0.7	II
			07	7	0.7	II
			08	8	0.7	II
			D8	8	0.5	I
			10	10	0.5	I
			12	12	0.5	I
			14	14	0.5	I
			16	16	0.5	I

	solder male contact 	solder female contact 	Holes	contacts	contact ϕ_1 (mm)	Use the grade
TLAU	        	        	04	4	1.3	II
			05	5	1.3	II
			06	6	0.9	II
			D8	8	0.7	II
			10	10	0.7	II
			12	12	0.7	II
			12a	12	0.5	I
			16	16	0.5	I
			19	19	0.5	I
TL2U	  	  	19	19	0.7	I
			26	26	0.5	I
			32	32	0.5	I
TL3U	  	  	27	27	0.7	I
			37	37	10- ϕ 0.7 27- ϕ 0.5	I
			40	40	0.5	I

TLB SERIES

TLB SERIES

TLB Series Technical Characteristics

- Temperature range: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$;
- Humidity: 90%~95%($40 \pm 2^{\circ}\text{C}$);
- Resistance to vibrations: 10Hz~2000Hz,
Accelerated speed 147m/S^2 , Instant break $\leq 1\text{us}$;
- Impulse: 980m/S^2 , Instant break $\leq 1\text{us}$;
- Sealing: (Note: Some connectors do not apply to this characteristics)
equipment: pressure difference $1.01 \times 10^2 \text{Pa}$, lasting 1min without bubble leakage($0.2 \times 10^2 \text{pa}$ at flange)
- matting: 2m water depth, 24h no leakage
- Salt spray corrosion test: 5%NaCl fog, 96H
- Endurance: ≥ 5000 recycles

• Insulation resistance

Item	Work environment	Insulation resistance(MΩ)
1	Normal temperature status	≥ 5000
2	125°C	≥ 500
3	Humid status	≥ 50
4	Under water pressure	≥ 50

Dielectric voltage withstand :

Usage level	Sea level V、AC	21336m altitude V、AC
0	500	125
I	750	175
II	875	225
III	1000	250

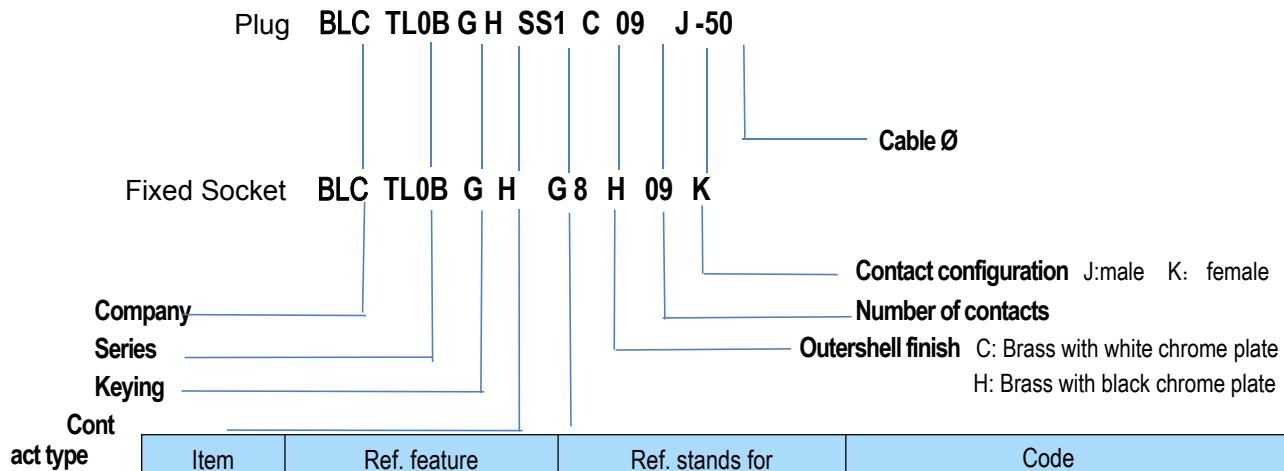
Contact Ø, Contact resistance, Rated current, Solder cup Ø, Max cable AWG

Contact Ø (mm)	Contact resistance (mΩ)	Rated current (A)	Solder cup Ø (mm)	Max cable size	
				mm ²	AWG
0.4	20	1	0.4	0.1	28
0.5	15	1.8	0.5	0.15	26
0.7	12.5	3.8	0.7	0.2	24
0.9	9	6.3	0.9	0.3	22
1.3	5	9	1.3	0.5	20
1.6	4	15	1.6	2.0	14
2.0	3.5	20	2.0	2.0	14
2.3	3	23	2.3	3.0	12
3.0	2.5	30	3.0	4.8	10

When multiple contacts work at the same time, their rated working current decline rate should comply with the following table :

Contacts numbers	1 ~ 10	11~20	21 ~ 30	31~62
Decline rate of rated working current %	0	10	20	30

Part numbering system



Item	Ref. feature	Ref. stands for	Code
1	Company	Company	BLC
2	Series	Series	TL0B, TL1B, TLAB, TL2B, TL3B
3	Keying	Keying	G, A, B, C, F, J
4	Contact type	Solder	H
		Print (straight)	B
		Print (elbow)	W
5	Connector type	Plug type	SS, SS1, S4, ...
		Socket type	G4, G8, KS1, ...
6	Outer shell finish	White chrome-plated brass	C
		Black chrome-plated brass	H
7	Contact layout	Number of contacts	Number (+Letter))
8	Contact configuration	Male contact	J
		Female contact	K
9	Cable diameter	Cable collet size	50,-55...

Part numbering system example

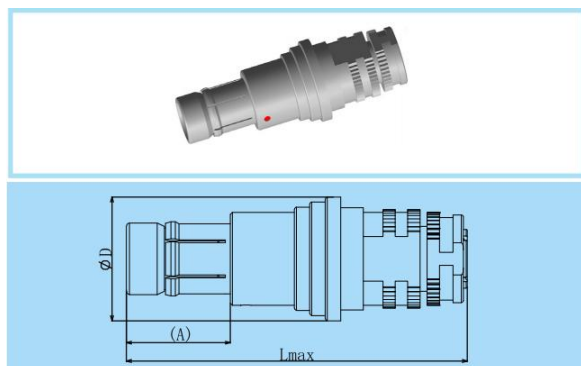
Straight plug

BLC TL0BGHSS1C09J-50 = BLC TL0B series, keying G, male solder contacts, SS1 straight plug, outershell in white chrome-plated brass, multipole type with 9 contacts, collet for Ø 4.2-5.0mm cable.

Fixed socket

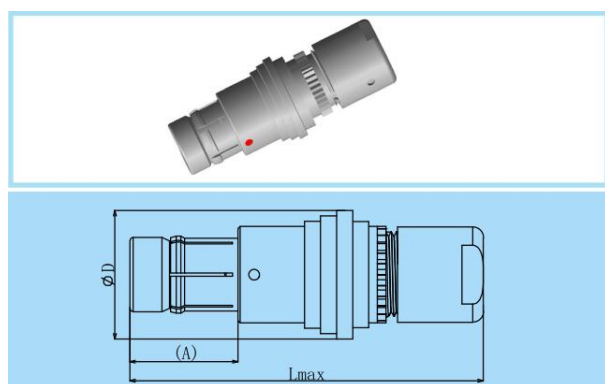
BLC TL0BGBG8C09K = BLC TL0B series, keying G, female print contacts, G8 fixed socket, outershell in white chrome-plated brass, multipole type with 9 contacts.

Metal housing models



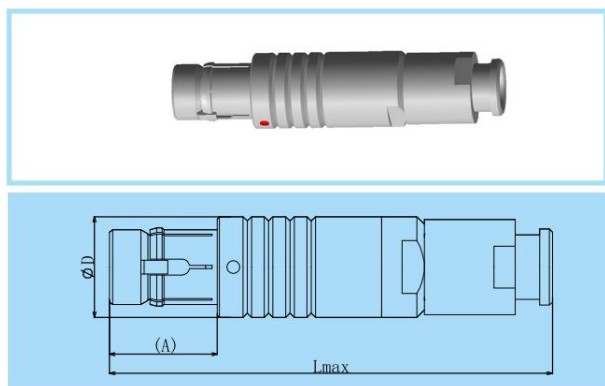
SS Straight plug, A type

Reference		Dimensions (mm)		
Model	Series	L	A	D
SS	TL0B	30	10	12
SS	TL1B	33	11	15
SS	TLAB	33	10	15.5
SS	TL2B	38	12	18
SS	TL3B	44	15	21



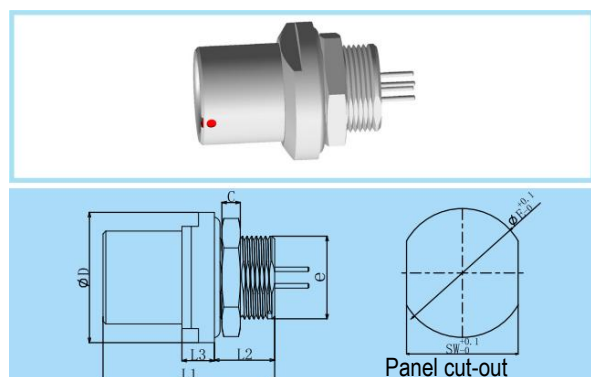
SS1 Straight plug, D type

Reference		Dimensions (mm)		
Model	Series	L	A	D
SS1	TL0B	33	10	12
SS1	TL1B	37.2	11	15
SS1	TLAB	42	10	15.5
SS1	TL2B	46	12	18
SS1	TL3B	52.5	15	21



S4 Straight plug, C type

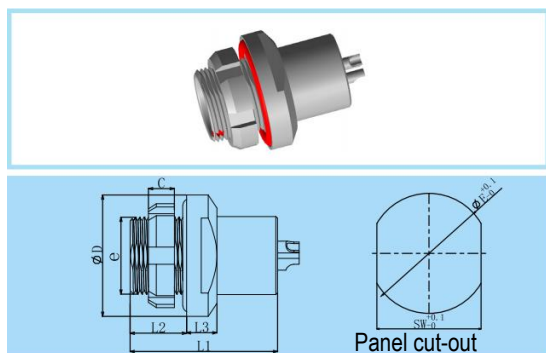
Reference		Dimensions (mm)		
Model	Series	L	A	D
S4	TL0B	44	10	9.4
S4	TL1B	54	11	12
S4	TLAB	54	10	13
S4	TL2B	60	12	15
S4	TL3B	66	15	18



G4 Socket, panel mounted

Reference		Dimensions (mm)							
Model	Series	L1	L2	L3	C	e	D	SW	E
G4	TL0B	18	6.5	3.5	2	M9X0.5	14	8.3	9.1
G4	TL1B	21	7	4	3	M14X1	18	12.1	14.1
G4	TLAB	19.5	7.5	3.6	3	M14X1	19	12.1	14.1
G4	TL2B	22.5	7	4.5	3	M16X1	22	13.6	16.1
G4	TL3B	26.5	10.5	5.4	3.5	M18X1	27	16.6	18.1

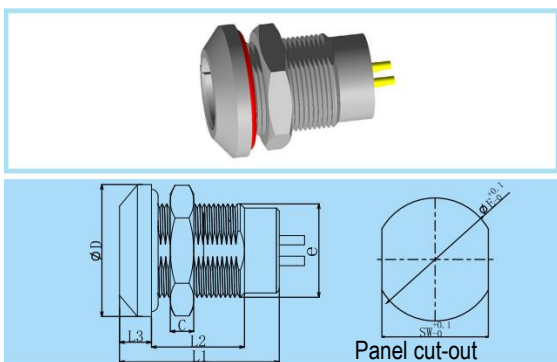
Note: all dimensions are in mm



G8 Socket, panel mounted

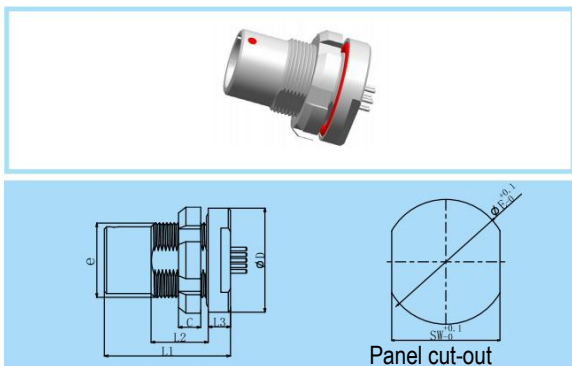
Reference		Dimensions (mm)							
Model	Series	L1	L2	L3	C	e	D	SW	E
G8	TL0B	17	6.5	3.5	3	M10X0.5	14.5	9.1	10.1
G8	TL1B	21	8	4	4	M14X1	18	12.1	14.1
G8	TLAB	19.5	7	2.5	4	M14X1	19	12.1	14.1
G8	TL2B	22.5	8	4	4	M16X1	22	15.1	16.1
G8	TL3B	26.5	10	4.5	5	M20X1	27	18.1	20.1

Note: single side machining flat with *



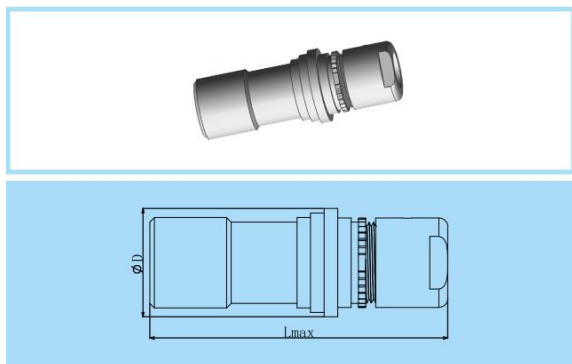
GL Socket, panel mounted

Reference		Dimensions (mm)							
Model	Series	L1	L2	L3	C	e	D	SW	E
GL	TL0B	17	10.1	3.4	2.5	M10X0.5	14	9.2	10.1
GL	TL1B	21	13	4	3	M14X1	19	12.1	14.1
GL	TL2B	22.5	14.5	4	4	M17X1	22	15.9	17.1



GK Socket, panel mounted

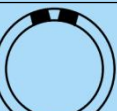
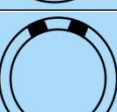
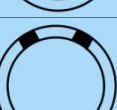
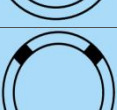
Reference		Dimensions (mm)							
Model	Series	L1	L2	L3	C	e	D	SW	E
GK	TL0B	17	7	3.5	3	M10X0.5	14	9.1	10.1
GK	TL1B	21	11	3	4	M14X1	18	12.1	14.1
GK	TLAB	19.5	10	3.5	4	M15X1	19	13.5	15.1
GK	TL2B	22.5	12	3	2.3	M18X1	22	16.1	18.1



KS1 Free Socket, double-way, D type

Reference		Dimensions (mm)	
Model	Series	L	D
KS1	TL0B	33	12
KS1	TL1B	36	15
KS1	TLAB	37	15.5
KS1	TL2B	45	18
KS1	TL3B	52	21

Alignment Key

Ref.	Angle	Front side view of socket	Shell series				
			TL0B	TL1B	TLAB	TL2B	TL3B
G	No key		●	●	●	●	●
A	0°		●	●	●	●	●
B	30°		●	●	●	●	●
C	45°		●	●	●	●	●
F	60°		●	●	●	●	●
J	90°		●	○			○

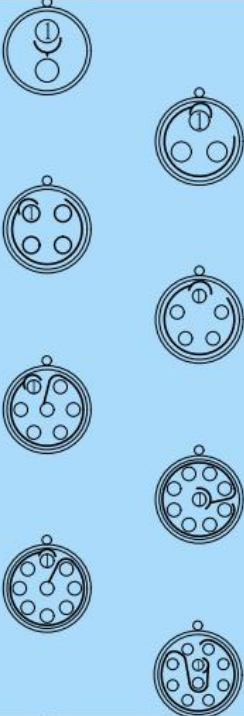
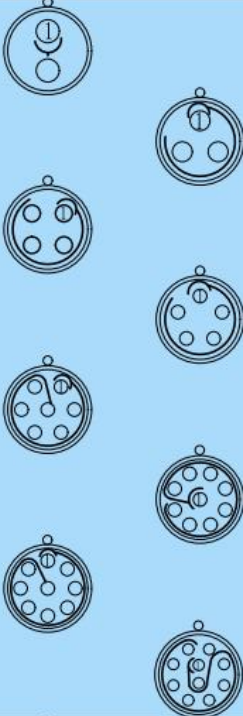
Note: ● Optimised angle
○ Special angle

Note: Front side view of socket

contacts configuration

Multipole

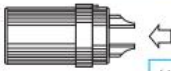
TLOB

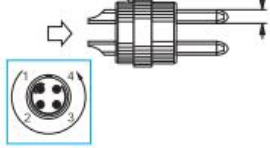
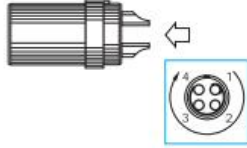
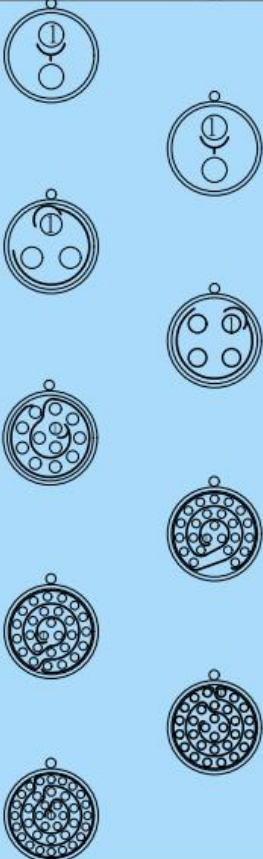
solder male contact 	solder female contact 	Holes	contacts	contact ϕ_A (mm)	Use the grade
		02	2	0.9	II
	03a	3	0.9	II	
	04a	4	0.7	I	
	05a	5	0.7	I	
	07a	7	0.5	I	
	09a	9	0.5	I	
	09b	9	0.5	I	
	10	10	0.5	I	
		02	2	1.3	III
	03a	3	1.3	III	
	04a	4	0.9	II	
	05a	5	0.9	II	
	07a	7	0.7	II	
	08a	8	0.7	II	
	10	10	0.5	I	
	14	14	0.5	I	
	16	16	0.5	I	

TL1B

TLAB

TL2B

solder male contact  	solder female contact  	Holes	contacts	contact ϕA (mm)	Use the grade
       	       	04	4	1.3	II
		05	5	1.3	II
		06	6	0.9	II
		D8	8	0.7	II
		10	10	0.7	II
		12	12	0.7	II
		16	16	0.5	I
19	19	0.5	I		
        	        	02	2	1.6	III
		03a	3	1.6	III
		04a	4	1.3	III
		07a	7	0.9	III
		08	8	0.9	III
		09	9	1- ϕ 1.3 8- ϕ 0.9	III
		10	10	0.9	III
		16b	16	0.7	I
		19	19	0.7	I

	solder male contact	solder female contact	Holes	contacts	contact ϕ_A (mm)	Use the grade
TL2B			26	26	0.5	I
			32	32	0.5	I
TL3B			02	2	2.0	III
			02a	2	3.0	III
			03	3	2.0	III
			04	4	2.0	III
			12	12	1.3	II
			24	24	0.7	I
			27	27	0.7	I
			30b	30	0.7	I
			37	37	10- $\phi 0.7$ 27- $\phi 0.5$	I

TLF Series

TLF Series Technical Characteristics

- Temperature range: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- Humidity: 90% - 95% ($40 \pm 2^{\circ}\text{C}$);
- Resistance to vibrations: 10Hz--2000Hz,
Accelerated speed 147m/S^2 , Instant break $\leq 1\mu\text{s}$;
- Impulse: 980m/S^2 , Instant break $\leq 1\mu\text{s}$;
- Sealing: (Note: Some connectors do not apply to this characteristics)
equipment: pressure difference $1.01 \times 10^2\text{Pa}$, lasting 1min without
bubble leakage ($0.2 \times 10^2\text{pa}$ at flange)
matting: 2m water depth, 24h no leakage
- Salt spray corrosion test: 5%NaCl fog, 96H;
- Endurance: ≥ 5000 recycles ;

Insulation resistance:

Item	Work environment	Insulation resistance($\text{M}\Omega$)
1	Normal temperature status	≥ 5000
2	125°C	≥ 500
3	Humid status	≥ 50
4	Under water pressure	≥ 50

Dielectric voltage withstand:

Usage level	Sea level V、AC	21336m altitude V、AC
0	500	125
I	750	175
II	875	225
III	1000	250

Contact Ø, Contact resistance, Rated current, Solder cup Ø, Max cable AWG

Contact Ø (mm)	Contact resistance ($\text{m}\Omega$)	Rated current (A)	Solder cup Ø (mm)	Max cable size	
				mm^2	AWG
0.4	20	1	0.4	0.1	28
0.5	15	1.8	0.5	0.15	26
0.7	12.5	3.8	0.7	0.2	24
0.9	9	6.3	0.9	0.3	22
1.3	5	9	1.3	0.5	20
1.6	4	15	1.6	2.0	14
2.0	3.5	20	2.0	2.0	14
2.3	3	23	2.3	3.0	12
3.0	2.5	30	3.0	4.8	10

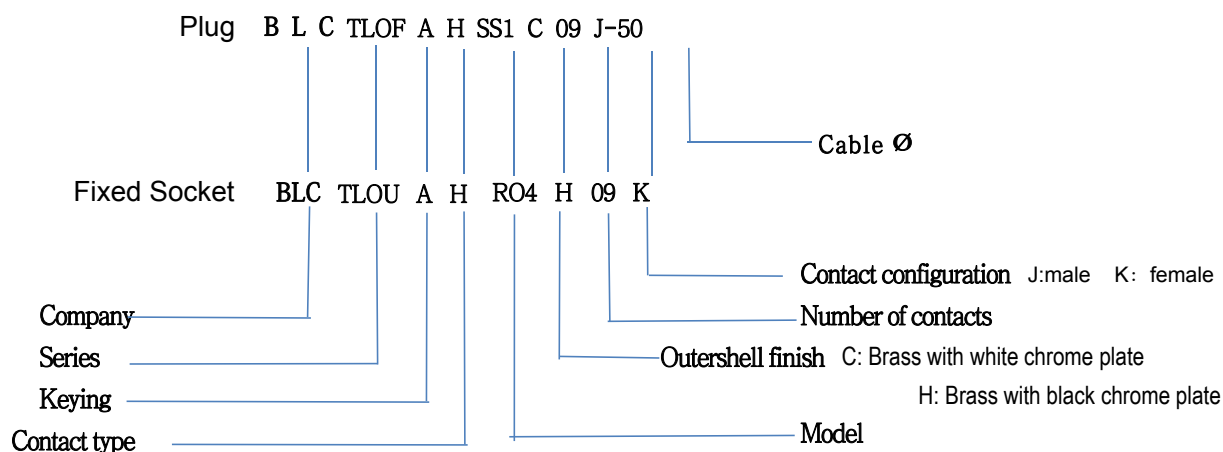
When multiple contacts work at the same time, their rated working current decline rate should comply with the following table:

Contacts numbers	1 ~ 10	11~20	21 ~ 30	31~62
Decline rate of rated working current %	0	10	20	30



TLF SERIES

Part numbering system



Item	Ref. feature	Ref. stands for	Code
1	Company	Company	BLC
2	Series	Series	TLOF、TL1F、TLAF、TL2F、TL3F
3	Keying	Keying	A、B、C
4	Contact type	Solder	H
		Print (straight)	B
		Print (elbow)	W
5	Connector type	Plug type	SS、SS1、S4、...
		Socket type	G4、G8、KS1、...
6	Outer shell finish	White chrome-plated brass	C
		Black chrome-plated brass	H
7	Contact layout	Number of contacts	Number (+Letter)
8	Contact configuration	Male contact	J
		Female contact	K
9	Cable diameter	Cable collet size	-50,-55...

Part numbering system example

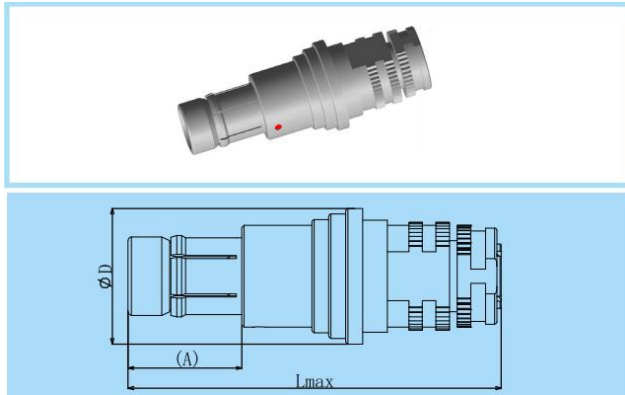
Straight plug

BLC TL0FAHSS1C05J-50 = BLC TL0F series, keying A, male solder contacts, SS1 straight plug, outershell in white chrome-plated brass, multipole type with 5 contacts, collet for Ø4.2-5.0mm cable.

Fixed socket

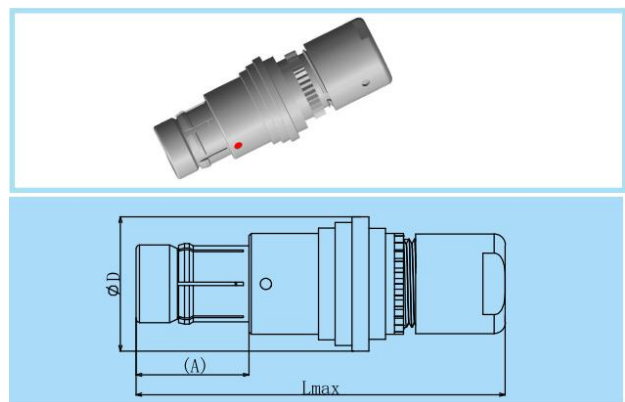
BLC TL0FABG8C05K = BLC TL0F series, keying A, female print contacts, G8 fixed socket, outershell in white chrome-plated brass, multipole type with 5 contacts.

Metal housing models



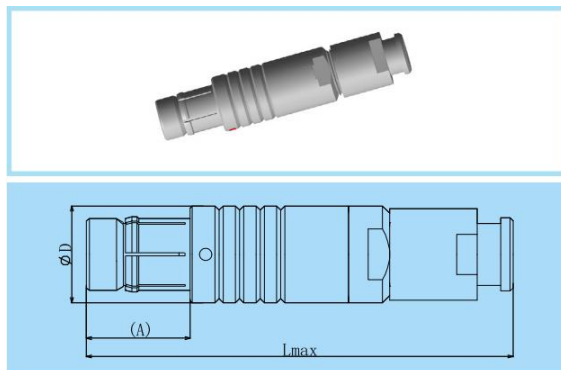
SS Plug, A type

Reference		Dimensions (mm)		
Model	Series	L	A	D
SS	TL0F	30	10	12
SS	TL1F	33	11	15
SS	TLAF	33	10	15.5
SS	TL2F	38	12	18
SS	TL3F	44	15	21



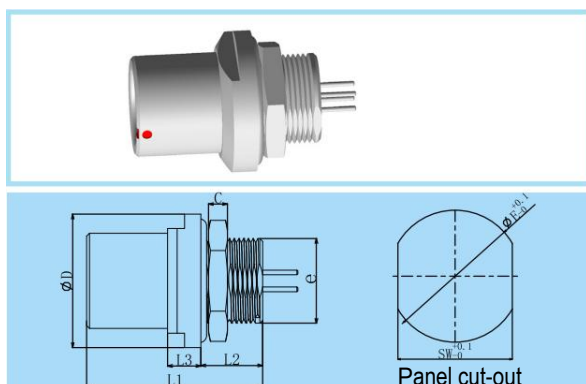
SS1 Plug, D type

Reference		Dimensions (mm)		
Model	Series	L	A	D
SS1	TL0F	33	10	12
SS1	TL1F	37.2	11	15
SS1	TLAF	42	10	15.5
SS1	TL2F	46	12	18
SS1	TL3F	52.5	15	21



S4 Plug, C type

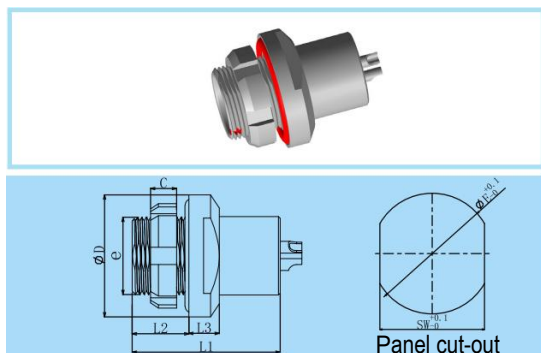
Reference		Dimensions (mm)		
Model	Series	L	A	D
S4	TL0F	44	10	9.4
S4	TL1F	54	11	12
S4	TLAF	54	10	13
S4	TL2F	60	12	15
S4	TL3F	66	15	18



G4 Socket, panel mounted

Reference		Dimensions (mm)								
Model	Series	L1	L2	L3	C	e	D	SW	E	
G4	TL0F	18.5	6.5	3.5	2	M9X0.5	14	8.3	9.1	
G4	TL1F	21	7	4	3	M14X1	18	12.1	14.1	
G4	TLAF	19.5	7.5	3.6	3	M14X1	19	12.1	14.1	
G4	TL2F	22.5	7	4.5	3	M16X1	22	13.6	16.1	
G4	TL3F	26.5	10.5	5.4	3.5	M18X1	27	16.6	18.1	

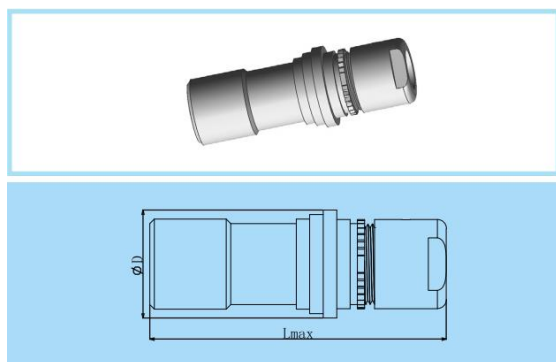
Note: all dimensions are in mm



G8 Socket, panel mounted

Reference		Dimensions (mm)							
Model	Series	L1	L2	L3	C	e	D	SW	E
G8	TL0F	17	6.5	3.5	3	M9X0.5	14	8.3	9.1
G8	TL1F	21	8	4	4	M14X1	18	12.1	14.1
G8	TLAF	19.5	7.5	2.5	4	M14X1	19	12.1	14.1
G8	TL2F	22.5	8	4	4	M16X1	22	15.2	16.1
G8	TL3F	26.5	10	4.5	5	M20X1	27	19.1	20.1

Note: single side machining flat with *



KS1 Free socket, double-way, D type

Reference		Dimensions (mm)	
Model	Series	L	D
KS1	TL0F	33	12
KS1	TL1F	36	15
KS1	TLAF	37	15.5
KS1	TL2F	45	18
KS1	TL3F	52	21

Note: all dimensions are in mm

Alignment Key

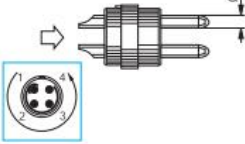
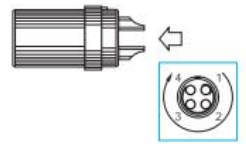
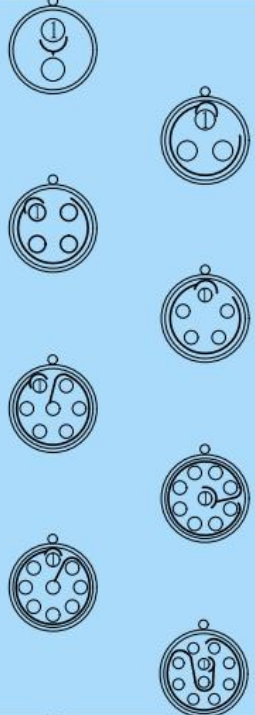
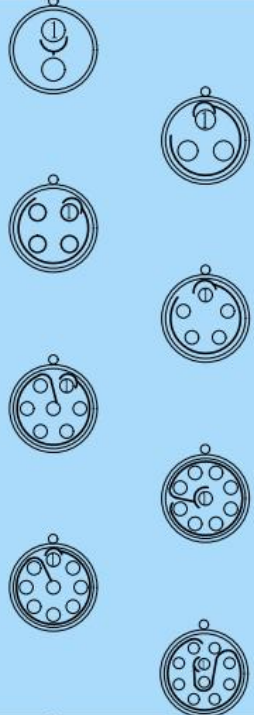
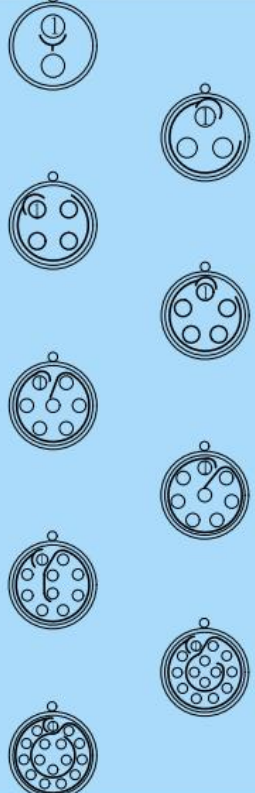
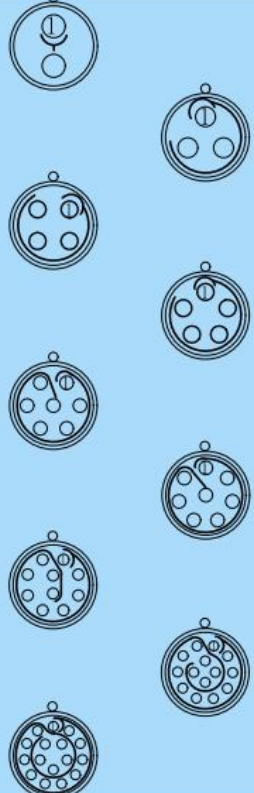
Shell Series	Ref.		
	A	B	C
TL0F			-
TL1F			-
TLAF			
TL2F			-
TL3F			-
Note: Front side view of socket			

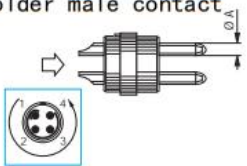
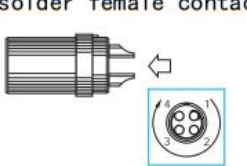
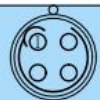
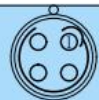
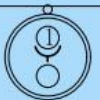
contacts configuration

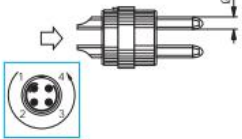
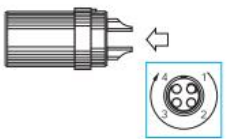
Multipole

TL0F

TL1F

solder male contact 	solder female contact 	Holes	contacts	contact ϕ_A (mm)	Use the grade
		02	2	0.9	II
		03a	3	0.9	II
		04a	4	0.7	I
		05a	5	0.7	I
		07a	7	0.5	I
		09a	9	0.5	I
		09b	9	0.5	I
		10	10	0.5	I
		02	2	1.3	III
		03a	3	1.3	III
		04a	4	0.9	II
		05a	5	0.9	II
		07a	7	0.7	II
		08a	8	0.7	II
		10	10	0.5	I
		14	14	0.5	I
		16	16	0.5	I

	solder male contact 	solder female contact 	Holes	contacts	contact ϕ_A (mm)	Use the grade
TLAF			04	4	1.3	II
			05	5	1.3	II
			06	6	0.9	II
			D8	8	0.7	II
			10	10	0.7	II
			12	12	0.7	II
			16	16	0.5	I
			19	19	0.5	I
TL2F			02	2	1.6	III
			03	3	1.6	III
			04	4	1.3	III
			04a	4	2- $\phi 2.3$ 2- $\phi 0.9$	III
			05	5	1.3	III
			06	6	0.9	III
			07	7	0.9	III
			08	8	0.9	III
			09	9	1- $\phi 1.3$ 8- $\phi 0.9$	III
			10	10	0.9	III

	solder male contact	solder female contact				
			Holes	contacts	contact ϕ_1 (mm)	Use the grade
TL2F			11	11	0.9	III
			16	16	0.7	I
			19	19	0.7	I
TL3F			02	2	2.0	III
			02a	2	3.0	III
			03	3	2.0	III
			04	4	2.0	III
			09	9	1- ϕ 2.0 8- ϕ 1.3	II
			10	10	1.3	II
			12	12	1.3	II
			16	16	4- ϕ 1.6 12- ϕ 0.7	II
			24	24	0.7	I
			27	27	0.7	I
			37	37	10- ϕ 0.7 27- ϕ 0.5	I
			40	40	0.5	I

TLK Series

TLK Series Technical Characteristics

- Temperature range: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- Humidity: 90%~95%(40±2°C)
- Resistance to vibrations: 10Hz~2000Hz,
Accelerated speed 147m/S², Instant break≤1us
- Shock test: 980m/S², Instant break≤1us
- Sealing: (Note: Some connectors do not apply to this characteristics)
equipment: pressure difference 1.01X10²Pa, lasting 1min without
bubble leakage(0.2X10²pa at flange)
- Salt spray corrosion test: 5%NaCl fog, 96H
- Endurance: ≥5000 recycles



TLK SERIES

● Insulation resistance:

Item	Work environment	Insulation resistance (MΩ)
1	Normal temperature status	≥5000
2	125°C	≥500
3	Humid status	≥50
4	Under water pressure	≥50

Dielectric voltage withstand:

Usage level	Sea level V、AC	21336m altitude V、AC
0	500	125
I	750	175
II	875	225
III	1000	250

Contact Ø, Contact resistance, Rated current, Solder cup Ø, Max cable AWG

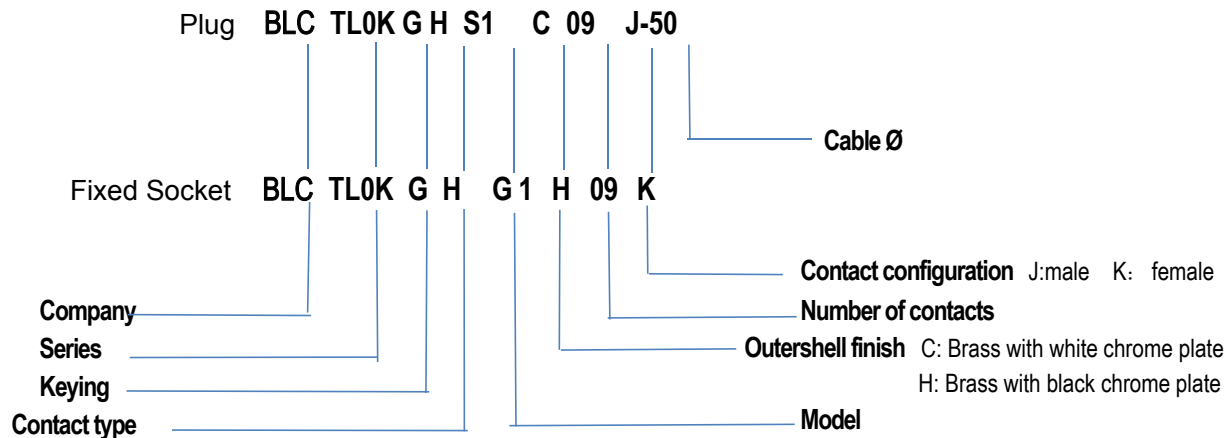
Contact Ø (mm)	Contact resistance (mΩ)	Rated current (A)	Solder cup Ø (mm)	Max cable size	
				mm ²	AWG
0.4	20	1	0.4	0.1	28
0.5	15	1.8	0.5	0.15	26
0.7	12.5	3.8	0.7	0.2	24
0.9	9	6.3	0.9	0.3	22
1.3	5	9	1.3	0.5	20
1.6	4	15	1.6	2.0	14
2.0	3.5	20	2.0	2.0	14
2.3	3	23	2.3	3.0	12
3.0	2.5	30	3.0	4.8	10

When multiple contacts work at the same time, their rated working current decline rate should comply with

the following table:

Contacts numbers	1 ~ 10	11~20	21 ~ 30	31 ~ 62
Decline rate of rated working current %	0	10	20	30

Part numbering system



Item	Ref. feature	Ref. stands for	Code
1	Company	Company	BLC
2	Series	Series	TL0K, TL1K, TL2K, TL3K
3	Keying	Keying	G, A, C, F
4	Contact type	Solder	H
		Print (straight)	B
		Print (elbow)	W
5	Connector type	Plug type	S1, S2.
		Socket type	G1...
6	Outer shell finish	White chrome-plated brass	C
		Black chrome-plated brass	H
7	Contact layout	Number of contacts	Number (+Letter)
8	Contact configuration	Male contact	J
		Female contact	K
9	Cable diameter	Cable collet size	-50,-55...

Part numbering system example

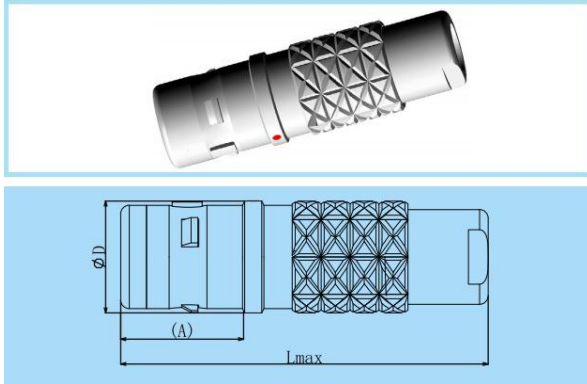
Straight plug

BLC TL1KGHS1C10J-60 = BLC TL1K series, keying G, male solder contacts, S1 straight plug, outer shell in white chrome-plated brass, multipole type with 10 contacts, collet for Ø5.2-6.0mm cable.

Fixed socket

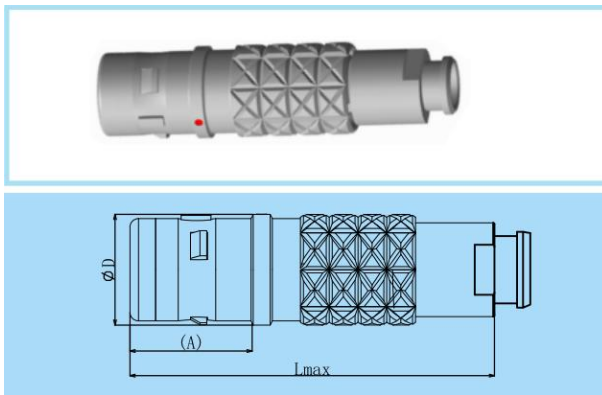
BLC TL1KGHG1C10K = BLC TL1K series, keying G, female solder contacts, G1 fixed socket, outer shell in white chrome-plated brass, multipole type with 10 contacts.

Metal housing models



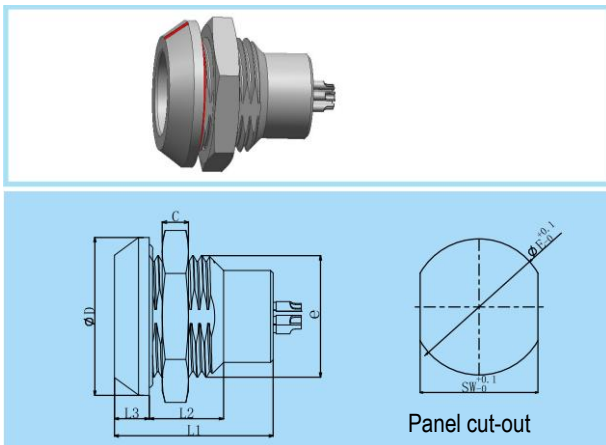
S1 Straight plug, D type

Reference		Dimensions (mm)		
Model	Series	L	A	D
S1	TL0K	40	11.5	11
S1	TL1K	45	15.2	13
S1	TL2K	53	17	16
S1	TL3K	62	21	19



S2 Straight plug, C type

Reference		Dimensions (mm)		
Model	Series	L	A	D
S2	TL0K	40	11.5	11
S2	TL1K	45	15.2	13
S2	TL2K	53	17	16
S2	TL3K	62	21	19

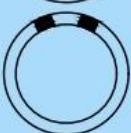


GL Socket, panel mounted

Reference		Dimensions (mm)							
Model	Series	L1	L2	L3	C	e	D	SW	E
GL	TL0K	19.7	8.5	4	3	M14X1	18	12.6	14.1
GL	TL1K	26.6	12.5	4.5	3	M16X1	20	14.6	16.1
GL	TL2K	27	13	5	4	M20X1	25	18.6	20.1
GL	TL3K	31.3	13	6	4	M24X1	31	22.6	24.1

Note: all dimensions are in mm

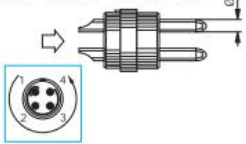
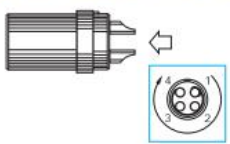
Alignment Key

Ref.	Angle	Front side view of socket	Shell series			
			TL0K	TL1K	TL2K	TL3K
G	0°		●	●	●	●
A	30°		●	●	●	○
C	45°		●	●	●	○
F	60°		●	●	●	○

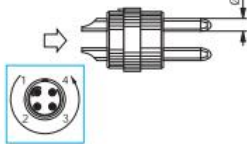
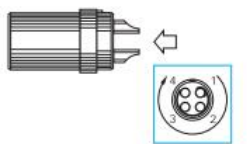
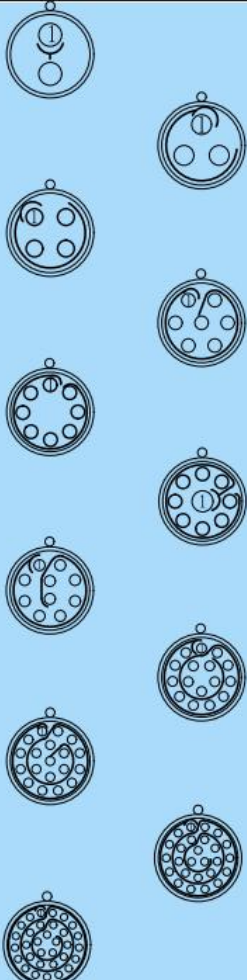
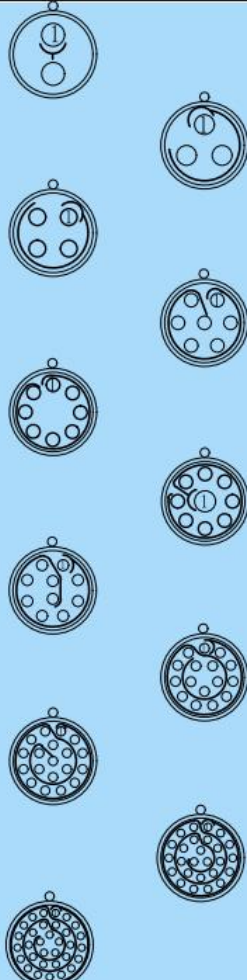
Note: ● Optimised angle
○ Special angle

contacts configuration

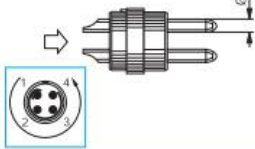
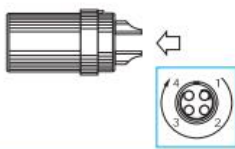
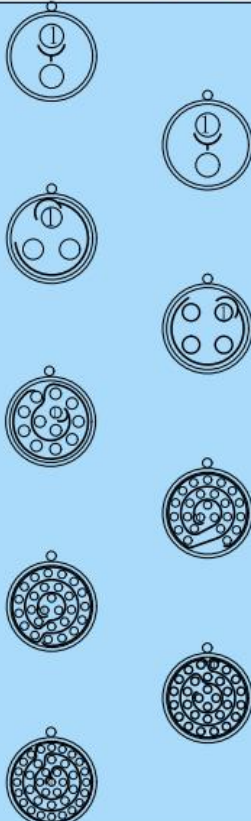
Multipole

	solder male contact 	solder female contact 	Holes	contacts	contact ϕ_A (mm)	Use the grade
TL0K			02	2	0.9	II
			03a	3	0.9	II
			04a	4	0.7	I
			05a	5	0.7	I
			07a	7	0.5	I
			09a	9	0.5	I
			09b	9	0.5	I
			10	10	0.5	I
TL1K			02	2	1.3	III
			03a	3	1.3	III
			04a	4	0.9	II
			05a	5	0.9	II
			07a	7	0.7	II
			08a	8	0.7	II
			10	10	0.5	I
			14	14	0.5	I
			16	16	0.5	I

TL2K

solder male contact		solder female contact		Holes	contacts	contact ϕ_A (mm)	Use the grade
							
		02	2	1.6	III		
		03a	3	1.6	III		
		04a	4	1.3	III		
		07a	7	0.9	III		
		08	8	0.9	III		
		09	9	1- ϕ 1.3 8- ϕ 0.9	III		
		10	10	0.9	III		
		16b	16	0.7	I		
		19	19	0.7	I		
		26	26	0.5	I		
		32	32	0.5	I		

TL3K

solder male contact		solder female contact		Holes	contacts	contact ϕ_A (mm)	Use the grade
							
		02	2	2.0	III		
		02a	2	3.0	III		
		03	3	2.0	III		
		04	4	2.0	III		
		12	12	1.3	II		
		24	24	0.7	I		
		27	27	0.7	I		
		30b	30	0.7	I		
		37	37	10- ϕ 0.7 27- ϕ 0.5	I		

TLY Series

TLY Series Technical Characteristics

- Temperature range: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$;
- Humidity: $90\% \sim 95\% (40 \pm 2^{\circ}\text{C})$;
- Resistance to vibrations: $10\text{Hz} \sim 2000\text{Hz}$,
Accelerated speed 147m/S^2 , Instant break $\leq 1\mu\text{s}$;
- Impulse: 980m/S^2 , Instant break $\leq 1\mu\text{s}$;
- Sealing: (Note: Some connectors do not apply to this characteristics)



equipment: pressure difference $1.01 \times 10^2 \text{Pa}$, lasting 1min without bubble leakage ($0.2 \times 10^2 \text{pa}$ at flange)

matting: 2m water depth, 24h no leakage

- Salt spray corrosion test: $5\% \text{NaCl}$ fog, 96H;
- Endurance: ≥ 5000 recycles;

● Insulation resistance:

Item	Work environment	Insulation resistance(M Ω)
1	Normal temperature status	≥ 5000
2	125°C	≥ 500
3	Humid status	≥ 50
4	Under water pressure	≥ 50

Dielectric voltage withstand:

Usage level	Sea level V、AC	21336m altitude V、AC
0	500	125
I	750	175
II	875	225
III	1000	250

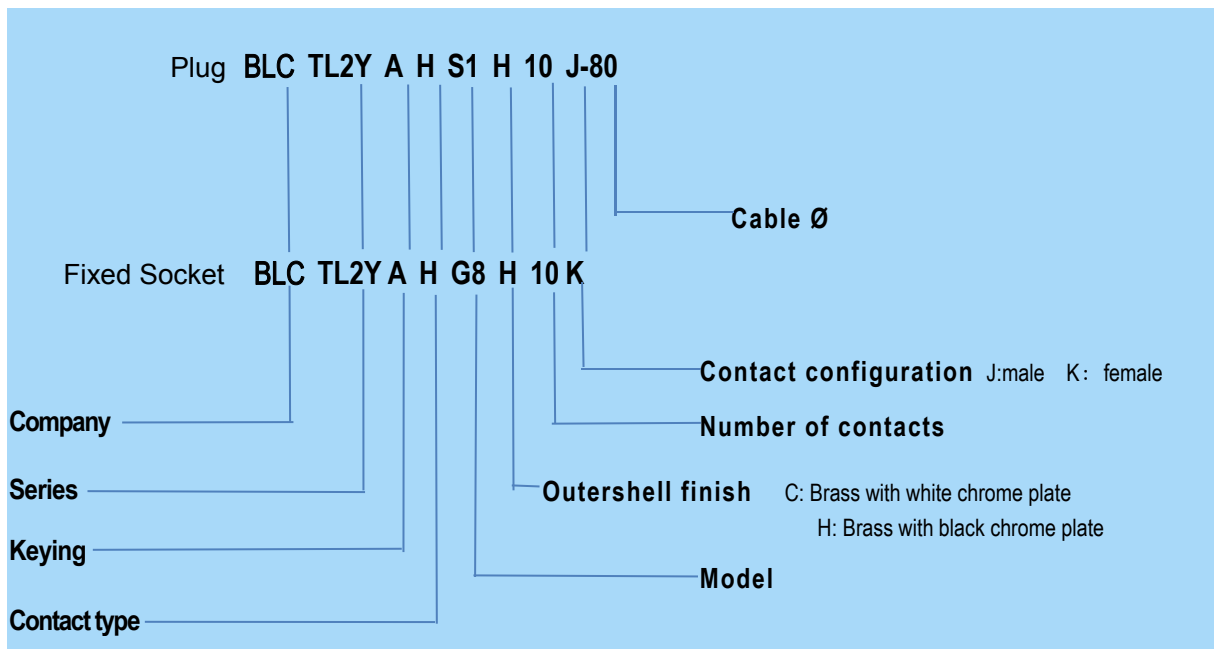
Contact $\varnothing$, Contact resistance, Rated current, Solder cup $\varnothing$, Max cable AWG

Contact $\varnothing$ (mm)	Contact resistance (m Ω)	Rated current (A)	Solder cup $\varnothing$ (mm)	Max cable size	
				mm 2	AWG
0.4	20	1	0.4	0.1	28
0.5	15	1.8	0.5	0.15	26
0.7	12.5	3.8	0.7	0.2	24
0.9	9	6.3	0.9	0.3	22
1.3	5	9	1.3	0.5	20
1.6	4	15	1.6	2.0	14
2.0	3.5	20	2.0	2.0	14
2.3	3	23	2.3	3.0	12
3.0	2.5	30	3.0	4.8	10

When multiple contacts work at the same time, their rated working current decline rate should comply with the following table:

Contacts numbers	1 ~ 10	11~20	21 ~ 30	31~62
Decline rate of rated working current %	0	10	20	30

Part numbering system



Item	Ref. feature	Ref. stands for	Code
1	Company	Company	BLC
2	Series	Series	TLOY、TL1Y、TLAY、TL2Y、TL3Y
3	Keying	Keying	A、B、C、D
4	Contact type	Solder	H
		Print (straight)	B
		Print (elbow)	W
5	Connector type	Plug type	S1、...
		Socket type	G8、GK、...
6	Outer shell finish	White chrome-plated brass	C
		Black chrome-plated brass	H
7	Contact layout	Number of contacts	Number (+Letter)
8	Contact configuration	Male contact	J
		Female contact	K
9	Cable diameter	Cable collet size	-50,-55..

Part numbering system example

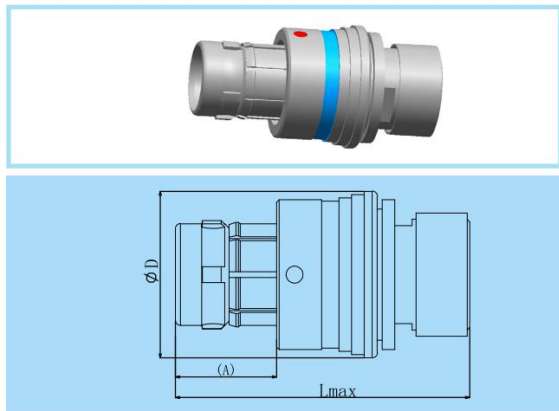
Straight plug

BLC TL2YAHS1H10J-80 = BLC TL2Y series, keying A, male solder contact, S1 straight plug, outershell in black chrome-plated brass, multipole type with 10 contacts, collet for Ø7.2-8.0mm cable.

Fixed socket

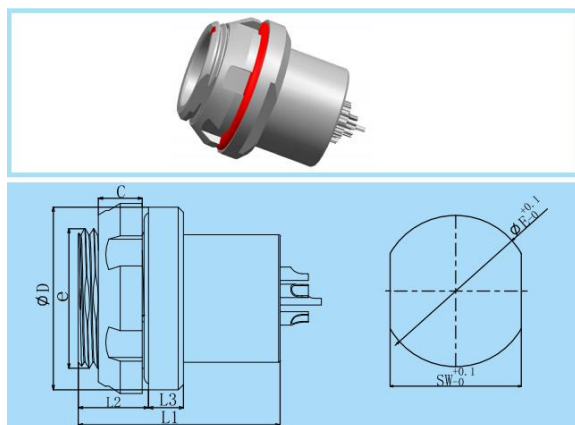
BLC TL2YAHG8H10K = BLC TL2Y series, keying A, female solder contact, G8 fixed socket, outershell in white chrome-plated brass, multipole type with 10 contacts.

Metal housing models



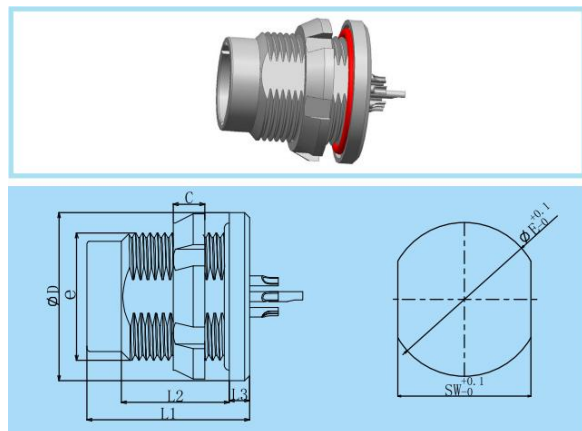
S1 Straight plug, B type

Reference		Dimensions (mm)		
Model	Series	L	A	D
S1	TL0Y	33	10	14
S1	TL1Y	35	11	16
S1	TLAY	35	10	16.5
S1	TL2Y	36	12	19.6
S1	TL3Y	40	15	23.9



G8 Fixed socket

Reference		Dimensions (mm)								
Model	Series	L1	L2	L3	C	e	D	SW	E	
G8	TL0Y	18	6.5	3	3	M11X0.75	15.5	10.1	11.1	
G8	TL1Y	22.5	8	4	4	M14X1	18.5	13.1	14.1	
G8	TLAY	19.5	7	2.5	4	M14X1	18.9	13.1	14.1	
G8	TL2Y	23	8	4	5	M16X1	20.8	15.1	16.1	
G8	TL3Y	26.5	11	4	5	M20X1	26	18.1	20.1	

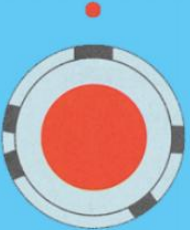


GK Fixed socket

Reference		Dimensions (mm)								
Model	Series	L1	L2	L3	C	e	D	SW	E	
GK	TL0Y	15.5	8	2.5	3	M11X0.75	15.5	10.1	11.1	
GK	TL1Y	18.5	9	3	4	M14X1	18.5	13.1	14.1	
GK	TLAY	17.2	9	3	4	M14X0.75	19	13.1	14.1	
GK	TL2Y	20.5	12.3	4	5	M16X1	20.8	15.1	16.1	
GK	TL3Y	26.5	12.5	4	5	M20X1	26	18.1	20.1	

Note: all dimensions are in mm

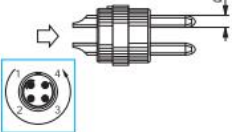
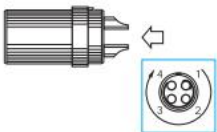
Alignment Key

Ref.	A	B	C	D
Color	Light brown	Red	Light brown	Green
Angle				
Note:Front side view of socket				

Contact configuration

Multipole

		solder male contact	solder female contact	Holes	contacts	contact ϕ_A (mm)	Use the grade
TL0Y				03	3	0.9	II
				04	4	0.7	I
				05	5	0.7	I
				07	7	0.5	I
				09b	9	0.5	I
				10	10	0.5	I
TL1Y				04	4	0.9	II
				06	6	0.7	II
				08	8	0.7	II
				D8	8	0.5	I
				10	10	0.5	I
				14	14	0.5	I
				16	16	0.5	I

	solder male contact 	solder female contact 	Holes	contacts	contact ϕ_1 (mm)	Use the grade
TLAY	       	       	04	4	1.3	II
			05	5	1.3	II
			06	6	0.9	II
			08	8	0.7	II
			10	10	0.7	II
			12	12	0.7	II
			16	16	0.5	I
			19	19	0.5	I
TL2Y	  	  	06	6	1.3	III
			19	19	0.7	I
			26	26	0.5	I
TL3Y	   	   	04	4	2.0	III
			18	18	0.9	II
			26	26	0.7	I
			37	37	0.5	I

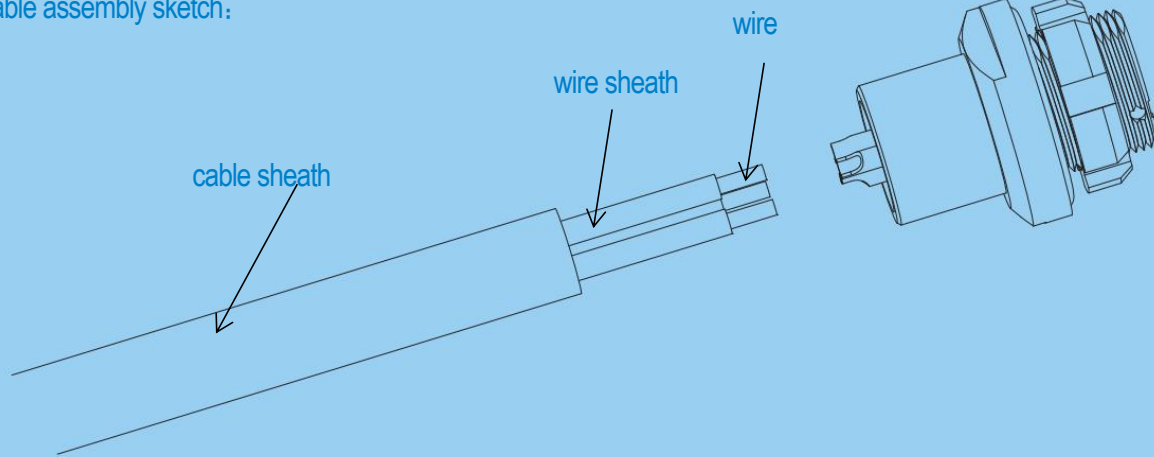
Cable assembly instructions

Cable assembly for socket

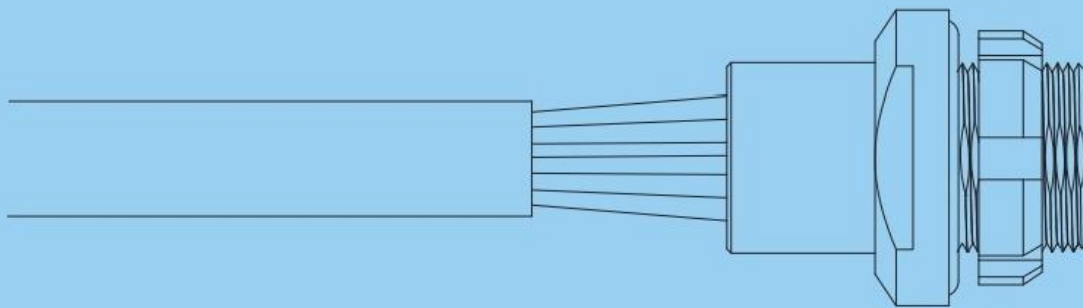
Cable assembly steps:

1. Strip the wire, the stripping length of the core wire is carried out according to the actual required length;
2. Put a heat shrink tube of appropriate specifications on each core wire;
3. After the welding wire is completed, push the heat shrink tube to the welding spot and heat shrink the heat shrink tube to protect the welding spot.

Cable assembly sketch:



Cable assembled sketch:



Note 1: This type connector has no special requirement on cable diameter.

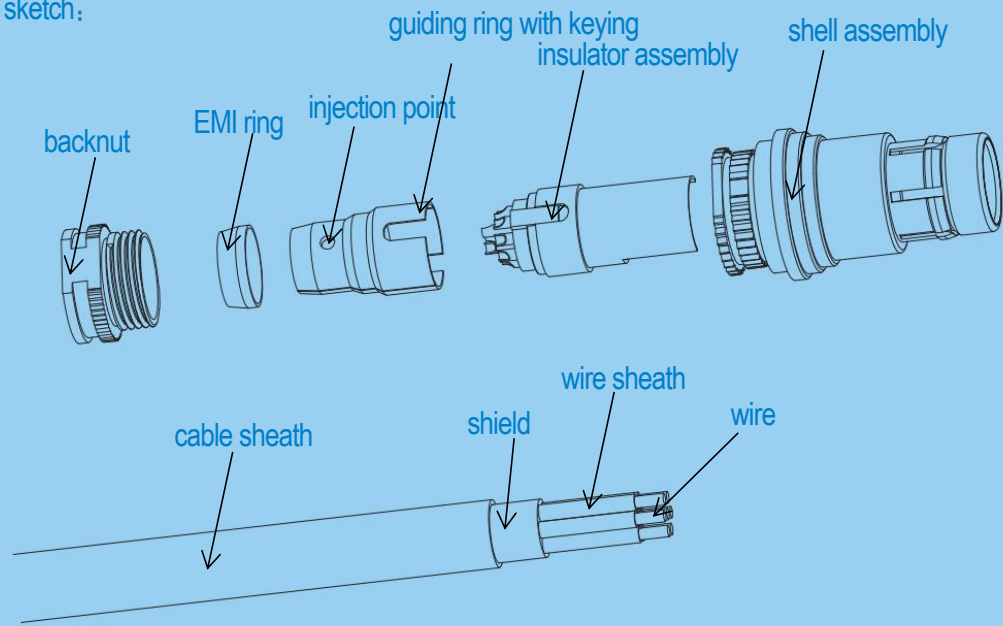
Note 2: The tightening torque of nut, pls refer to “remarks” on page 83.

A type tail

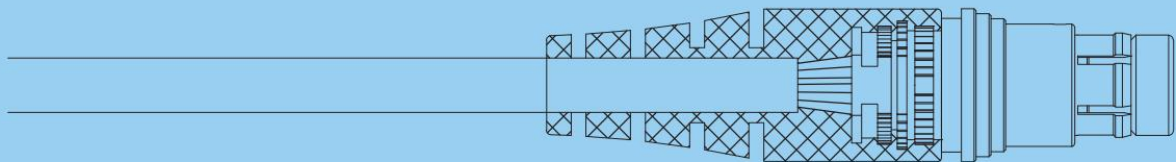
Cable assembly steps:

- 1, strip the cable, according to the actual situation of the connector to strip the cable;
2. Unscrew the connector tail nut and remove the press sleeve, bushing and insulator assembly from the plug at one time;
3. Cover the tail nut and the wire pressing sleeve from one end of the cable stripping in turn, and cover the heat shrink sleeve of appropriate specifications on each core wire;
4. After the welding wire is completed, push the heat shrink sleeve to the solder joint, and heat shrink the heat shrink sleeve to protect the solder joint;
5. Clamp the liner on the insulator assembly;
6. Push the insulator assembly into the appropriate position of the connector housing;
7. When there are sealing requirements, an appropriate amount of silicone should be injected from the bushing gluing mouth;
8. Cover the shielding network on the cable on the bush bevel, and use the press sleeve to squeeze and fix the shielding network;
- 9, use the tool to tighten the tail nut (tightening torque, please refer to the following "precautions");
- 10, the tail plastic sealing, if there is no plastic sealing mold, can be used to protect the connector tail after heat shrink sleeve thermoplastic.

Cable assembly sketch:



Cable assembled sketch:



A type tail – cable size

Series	Shell series	Cable size	Inner housing size (mm)	Max cable diameter (mm)
TLB TLF	TLOB、TLOF	-50	3.6	6.0
	TL1B、TL1F	-55	5.0	8.0
	TLAB、TLAF	-65	6.2	9.0
	TL2B、TL2F	-70	7.2	10.0
	TL3B、TL3F	-95	9.5	12.0

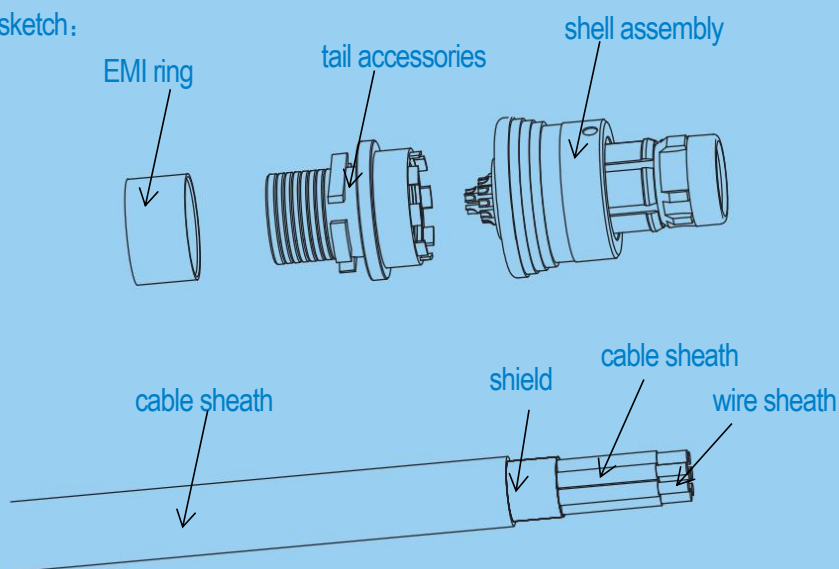
Note: Because this type of connector has no cable collet structure, stripping the wire can be properly lengthened, only the core wire can pass through the back nut, EMI ring and guiding ring with keying after stripping the wire, so the cable diameter range of this type of connector is wide.

B type tail

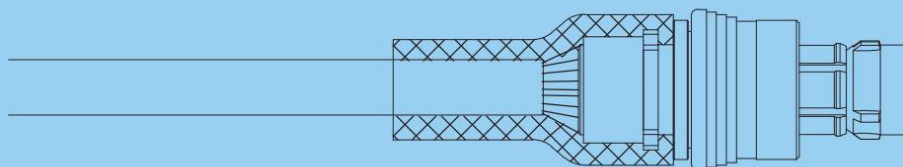
Cable assembly steps:

- 1, strip the cable, according to the actual situation of the connector to strip the cable;
2. Unscrew the connector liner;
3. Cover one end of the cable with a press sleeve and a tail pipe successively, and cover each core wire with a heat shrink sleeve of appropriate specifications;
4. After the welding wire is completed, push the heat shrink sleeve to the solder joint, and heat shrink the heat shrink sleeve to protect the solder joint;
- 5, use the tool to screw the liner into the housing assembly (tightening torque please refer to the following "Precautions");
- 6, there are sealing requirements, need to inject appropriate amount of silicone at the welding line;
7. Cover the shield net on the cable on the tail pipe line, and use the press sleeve to squeeze and fix the shield net;
- 8, the tail plastic sealing, if there is no plastic sealing mold, the heat shrink sleeve thermoplastic can be used to protect the connector tail.

Cable assembly sketch:



Cable assembled sketch:



B type tail – cable size

Series	Shell series	Cable size	Inner housing size (mm)	Max cable diameter (mm)
TLY	TLOY	-50	5.8	6.0
	TL1Y	-55	7.2	7.0
	TLAY	-60	8.5	8.0
	TL2Y	-80	10	10.0
	TL3Y	-110	12	12.0

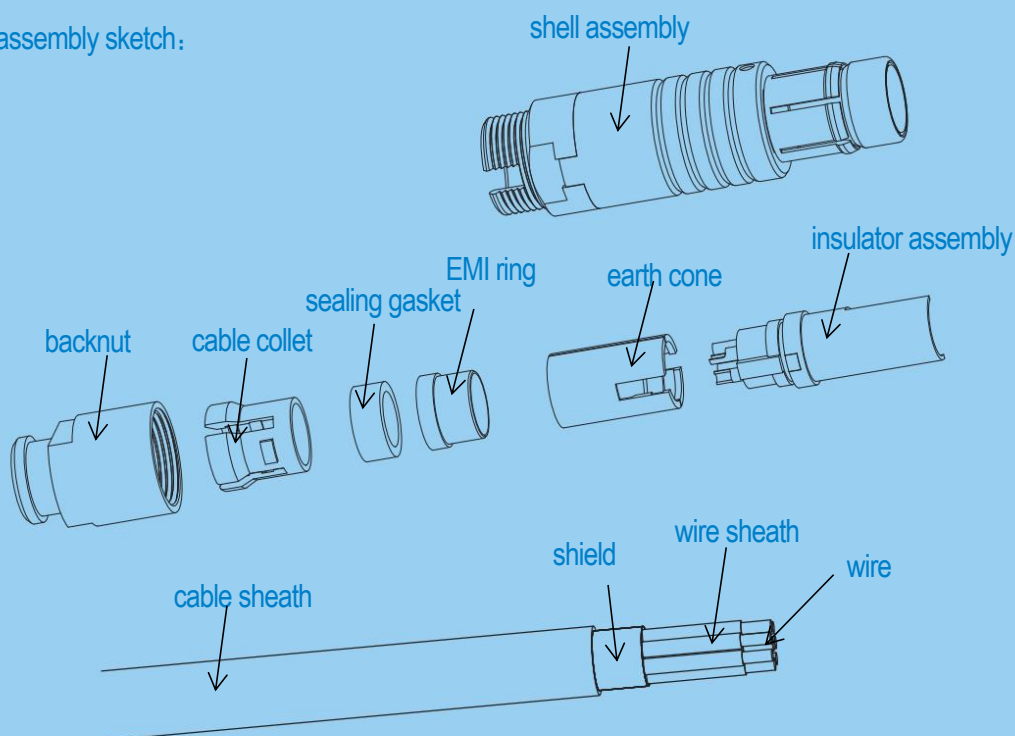
Note: Because this type of connector does not have the structure of cable collet, stripping the wire can be properly lengthened, only the core wire can pass through the liner after stripping the wire, so it should be this type connectors have a wide range of cable diameters.

C type tail

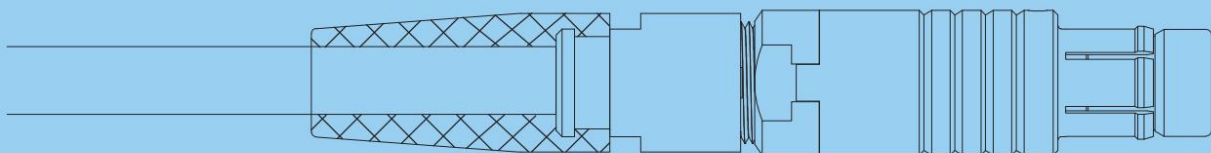
Cable assembly steps:

1. strip the cable, according to the actual situation of the connector to strip the cable;
2. screw off the connector tail nut, from the connector in turn take out the clamp, rubber pad, wire sleeve, ground lug, insulator assembly;
3. From one end of the cable stripping, cover the tail nuts, wire clips, rubber pads, and wire sleeves in turn, and cover each core wire with a heat shrink sleeve of appropriate specifications;
4. After the welding line is completed, push the heat shrink sleeve to the solder joint, and heat shrink the heat shrink sleeve to protect the solder joint;
5. Clamp the ground strip on the insulator assembly;
6. Push the insulator assembly into the appropriate position of the connector housing;
7. Clamp the shielding net on the cable between the bushing and the wire sleeve, and push the wire sleeve, rubber pad and wire clamp into the connector housing in turn;
8. use the tool to tighten the tail nut (tightening torque, please refer to the following "precautions");
9. It is recommended to use plastic sealing mold for the tail.

Cable assembly sketch:



Cable assembled sketch:



C type tail – cable size

Series	TLB、TLF、TLK					Cable size	Inner housing size (mm)	Max cable diameter (mm)
Shell No.	3	2	A	1	0			
Cable size range to choose	●	●	●	●	●	-50	-	5.1
	●	●	●	●		-55	5.1	5.6
	●	●	●	●		-60	5.6	6.1
	●	●	●	●		-65	6.1	6.6
	●	●	●			-70	6.6	7.1
	●	●				-75	7.1	7.6
	●	●				-80	7.6	8.1
	●					-90	8.1	9.1
	●					-100	9.1	10.1
	●					-110	10.1	11.1

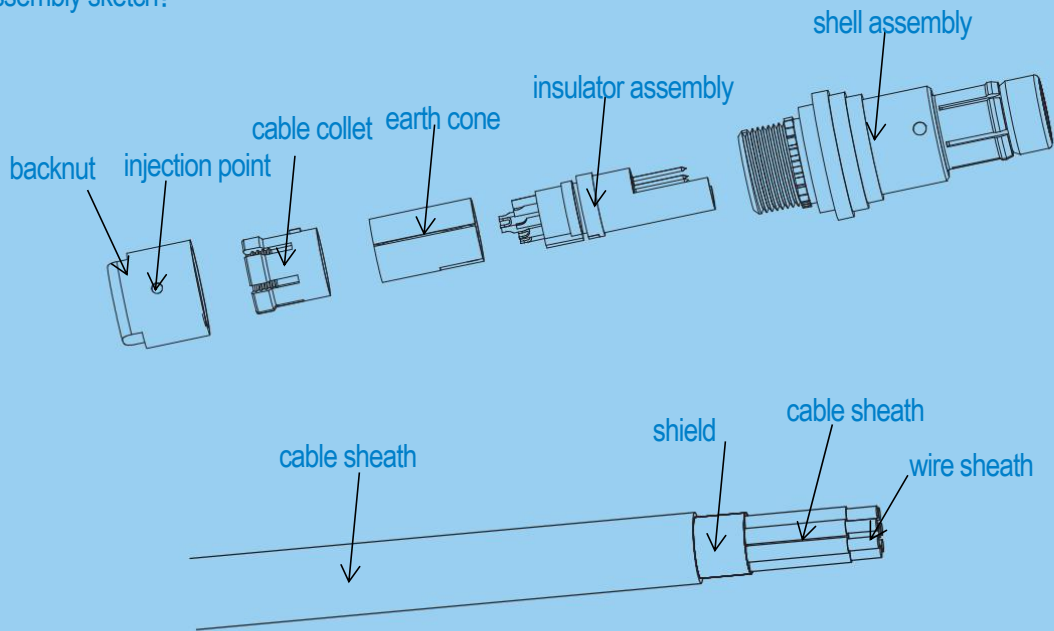
Note: Because the cable needs to be passed through the back nut, cable collet, sealing gasket, and EMI ring of this type of connector, the cable collet has the maximum deformation when the tail nut is tightened. Therefore, the outer diameter of the cable needs to be limited in the model.

C type tail

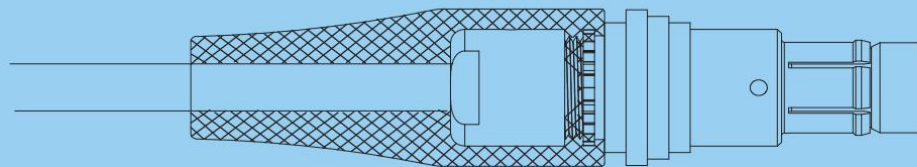
Cable assembly steps:

- 1, strip the cable, according to the actual situation of the connector to strip the cable;
- 2, screw off the connector tail nut, from the connector in turn take out the wire clamp, ground lug, insulator assembly;
3. From one end of the cable stripping, cover the tail nut of the wire sleeve and the wire clip in turn, and cover the heat shrink sleeve of appropriate specifications on each core wire;
4. After the welding wire is completed, push the heat shrink sleeve to the solder joint, and heat shrink the heat shrink sleeve to protect the solder joint;
5. Clamp the ground strip on the insulator assembly;
6. Push the insulator assembly into the appropriate position of the connector housing;
7. Clamp the shielding net on the cable between the ground lug and the wire clamp, and use the tool to tighten the tail nut (tightening torque, please refer to the following "Precautions");
8. When there are sealing requirements, an appropriate amount of silicone should be injected from the tail nut filling mouth;
- 9, tail plastic sealing, if there is no plastic sealing mold, available. Heat shrink sleeve heat shrink to protect connector tail.

Cable assembly sketch:



Cable assembled sketch:



D type tail – cable size

Series	TLB、TLF					Cable size	Inner housing size (mm)	Max cable diameter (mm)
Shell No.	3	2	A	1	0			
Cable size range to choose	●	●	●	●	●	-50		5.1
	●	●	●	●	●	-55	5.1	5.6
	●	●	●	●		-60	5.6	6.1
	●	●	●	●		-65	6.1	6.6
	●	●	●	●		-70	6.6	7.1
	●	●	●	●		-75	7.1	7.6
	●	●	●			-80	7.6	8.1
	●	●				-90	8.1	9.1
	●					-100	9.1	10.1
	●					-110	10.1	11.1

Series	TLU					Cable size	Inner housing size (mm)	Max cable diameter (mm)
Shell No.	3	2	A	1	0			
Cable size range to choose	●	●	●	●	●	-50	—	5.1
	●	●	●	●	●	-55	5.1	5.6
	●	●	●	●		-60	5.6	6.1
	●	●	●	●		-65	6.1	6.6
	●	●	●	●		-70	6.6	7.1
	●	●	●	●		-75	7.1	7.6
	●	●	●			-80	7.6	8.1
	●	●				-90	8.1	9.1
	●					-100	9.1	10.1
	●					-110	10.1	11.1

Note: Because the cable needs to pass through the back nut and cable collet of the connector of this type, the cable collet has the maximum deformation when the back nut is tightened. Therefore, the outer diameter of the cable needs to be limited in the model.

Remarks:

Nut cap torque(back nut cap)

Series	Shell No.			
TLU	0	1、A	2	3
TLB	0	1、A	2	3
TLF	0	1、A	2	3
TLK	0	1	2	3
TLY	0	1、A	2	3
Torque(Nm)	0.6	1.0	2.0	3.5

Nut torque(tighten nut)

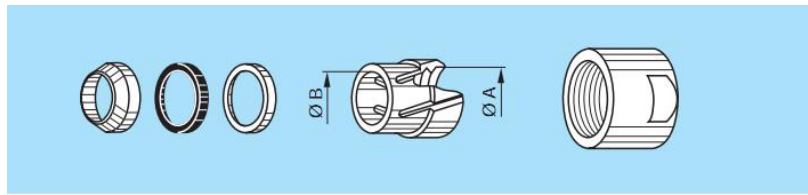
Thread spec	≤M7	≤M11	≤M14	≤M20
Torque(Nm)	≤2	≤3.5	≤4.5	≤5

B Series cable collet



	Ref.	Cable collet Ø		Cable Ø		Remark
		ØA	ØB	Min	Max	
00	22	2.2	-	1.4	2.2	
	27	2.7	-	>2.2	2.7	
	32	3.2	2.8	>2.7	3.2	
0B	32	3.2	-	2.2	3.2	
	42	4.2	-	3.3	4.2	
	52	5.2	5.2	4.3	5.2	
1B	42	4.2	-	3.2	4.2	
	52	5.2	-	4.3	5.2	
	62	6.2	-	5.3	6.2	
	72	7.2	7.0	6.3	7.2	
2B	52	5.2	-	4.2	5.2	
	62	6.2	-	5.3	6.2	
	72	7.2	-	6.3	7.2	
	82	8.2	-	7.3	8.2	
	92	9.2	9.2	8.3	9.2	
3B	62	6.2	-	5.3	6.2	
	72	7.2	-	6.3	7.2	
	82	8.2	-	7.3	8.2	
	92	9.2	-	8.3	9.2	
	10	10.2	-	9.3	10.0	
	11	11.2	-	10.1	11.0	
	12	11.9	10.2	11.1	11.7	

K Series、T Series cable collet



	Ref.	Cable collet Ø		Cable Ø		Remark
		ØA	ØB	Min	Max	
0K 0T	30	3.1	-	2.6	3.0	
	35	4.2	4.2	3.1	3.5	
	40	4.2	4.2	3.6	4.0	
	45	5.2	5.2	4.1	4.5	
	50	5.2	5.2	4.6	5.0	
1K 1T	40	4.2	-	3.6	4.0	
	45	5.2	-	4.1	4.5	
	50	5.2	-	4.6	5.0	
	55	6.2	6.2	5.1	5.5	
	60	6.2	6.2	5.6	6.0	
	65	7.2	6.7	6.1	6.5	
	70	7.2	-	6.6	7.0	
2K 2T	50	5.2	-	4.6	5.0	
	55	6.2	-	5.1	5.5	
	60	6.2	-	5.6	6.0	
	65	7.2	-	6.1	6.5	
	70	7.2	-	6.6	7.0	
	75	8.2	8.2	7.1	7.5	
	80	8.2	8.2	7.6	8.0	
	85	9.2	8.6	8.1	8.5	
	90	9.2	9.0	8.6	9.0	
3K 3T	60	6.2	-	5.6	6.0	
	65	7.2	-	6.1	6.5	
	70	7.2	-	6.6	7.0	
	75	8.2	-	7.1	7.5	
	80	8.2	-	7.6	8.0	
	85	9.2	-	8.1	8.5	
	90	9.2	-	8.6	9.0	
	95	10.2	10.2	9.1	9.5	
	10	10.2	10.2	9.6	10.0	
	11	11.2	10.6	10.1	10.5	