

Circular push-pull connectors

Introduction:

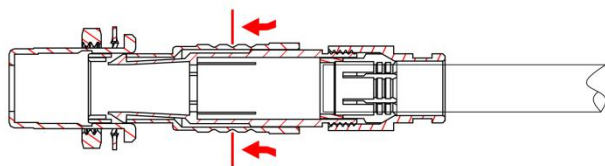
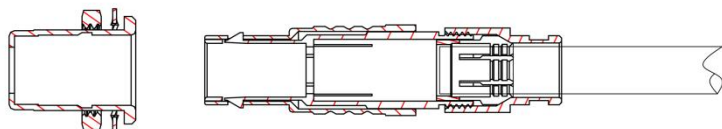
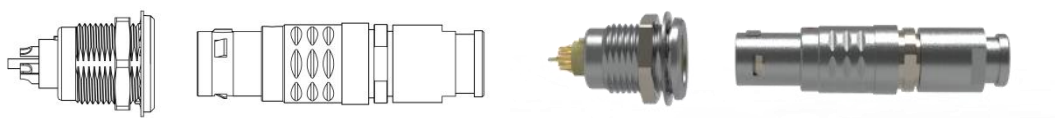
This self-latching system is renowned worldwide for its easy and quick mating and unmating features. It provides absolute security against vibration, shock or pull on the cable, and facilitates operation in a very limited space.

Circular electrical connector adopts this push-pull self-locking structure, which is widely used in electronic, instrumentation, video processing, medical and other equipment electrical signal connection. It is especially suitable for electric signal connection on instruments and equipment which need frequent connection and separation and shielding.

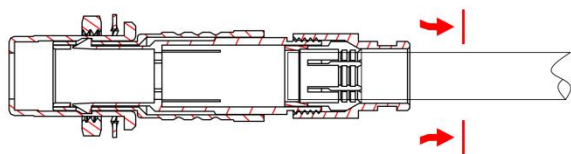
Characteristics:

- Push-pull self - locking connection connection separation is simple and quick;
- The delicate self - locking device ensures the firm and reliable connection;
- The reasonable key design has the function of preventing blind insertion and a variety of key changes;
- Compact structure design, can effectively save equipment space;
- The all-metal structure can effectively shield the function;

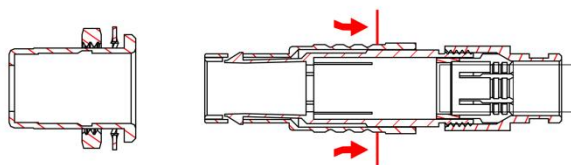
Drawings:



The self-latching system allows the connector to be mated by simply pushing the plug axially into the socket.



Once firmly latched, connection cannot be broken by pulling on the cable or any other component part other than the outer release sleeve.



When required, the connector is disengaged by a single axial pull on the outer release sleeve. This first disengages the latches and then withdraws the plug from the socket.

PLASTIC SERIES

1P SERIES

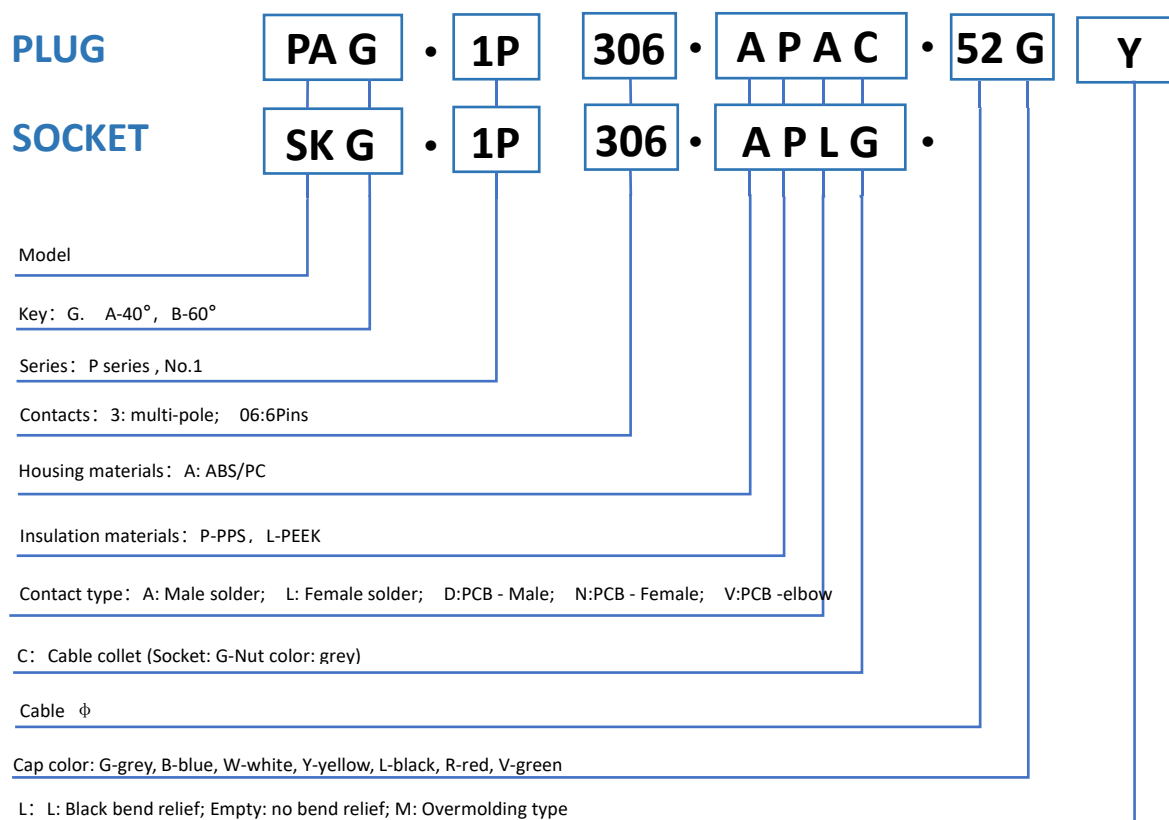
P series plastic push-pull connectors

- Push-pull self-latching system;
- Multi-pole / 1P: 2~14 contacts, 2P: 3~16 contacts;
- Solder or PCB print contacts;
- High density installation to save space;
- Tinted back nut of plugs and round nut of sockets to avoid mismatching;
- Plastic housing, 2 leaf-springs locking, groove to avoid rotation

P series Technical characteristic

- Mating cycles: > 2000 times
- Humidity: at 60 °C, max. up to 95%
- Temperature range: -40 ° ~ + 80 °
- Protection class(mated): IP50~IP65

P series part numbering system



Example

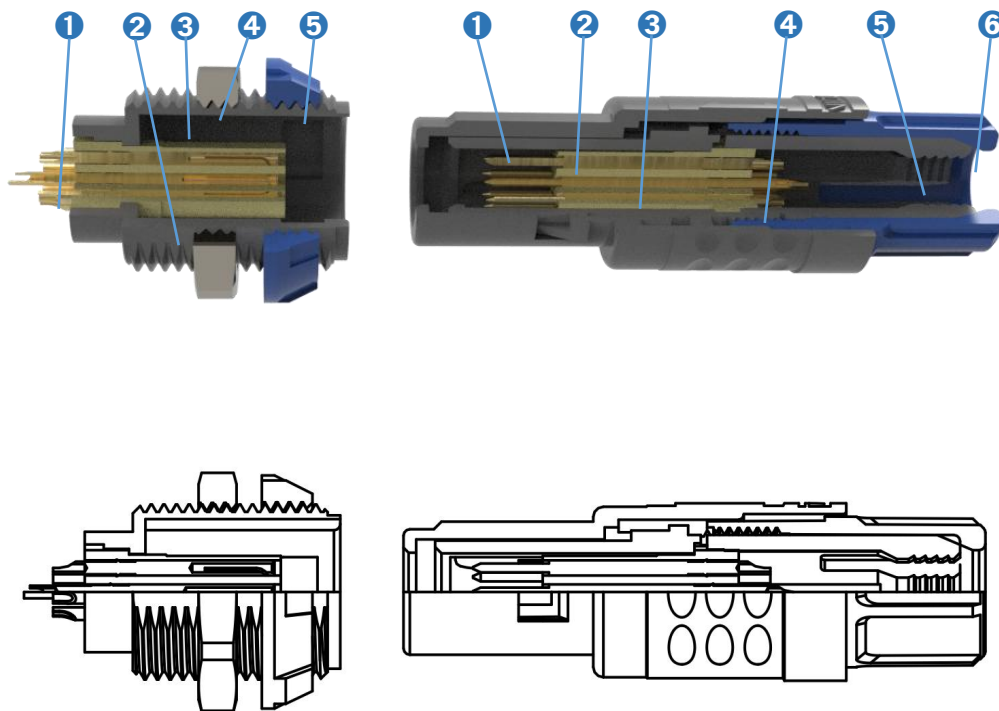
Straight Plug with cable collet:

PAG.1P306.APAC.52G: Straight plug, Key (G) with cable collet, 1P series, Multi-pole type, 6Pins, ABS shell and collet nut, PPS insulation, Male solder contacts, C type collet for 5.2 mm diameter cable. Grey color cap.

Fixed Socket:

SKG.1PF306.APLG: Fixed Socket, Key (G) , 1P series, Multi-pole type, 6Pins, ABS shell, PPS insulation, Female solder contacts. Grey color nut.

Part section showing internal components



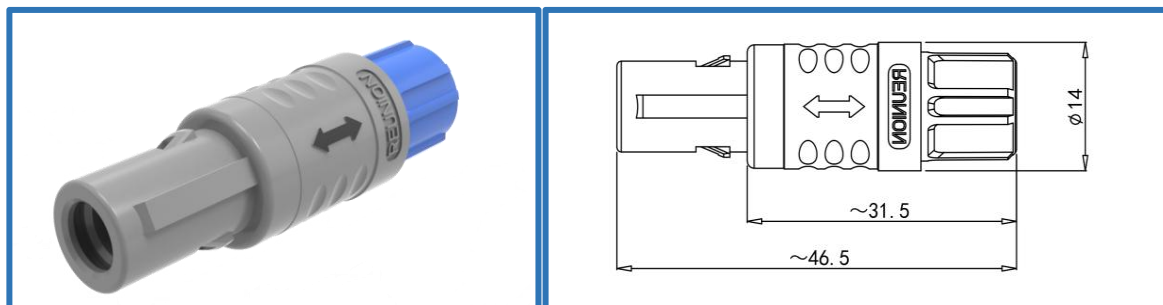
1P FIXED SOCKET

- ① 插孔 Female contact
- ② 孔绝缘体 Insulator
- ③ 插座壳体 Outer shell
- ④ 六角螺母 Hexagonal nut
- ⑤ 前螺母 Front nut

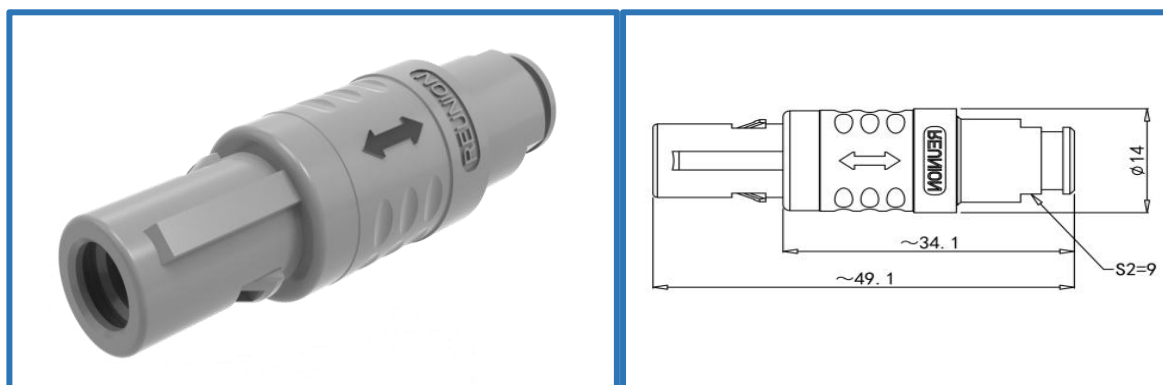
1P STRAIGHT PLUG

- ① 插头壳体 Outer shell
- ② 插头内壳 Latch sleeve
- ③ 针绝缘体 Insulator
- ④ 插针 Male contact
- ⑤ 电缆夹 Cable collet
- ⑥ 尾部螺帽 Back nut

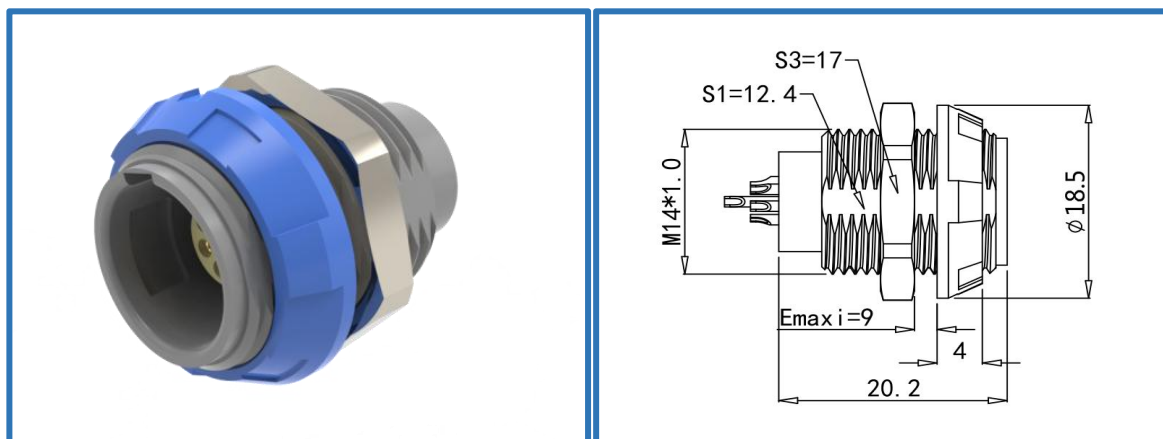
PAG Straight Plug, key (G) or keys(A,B,C) with cable collet



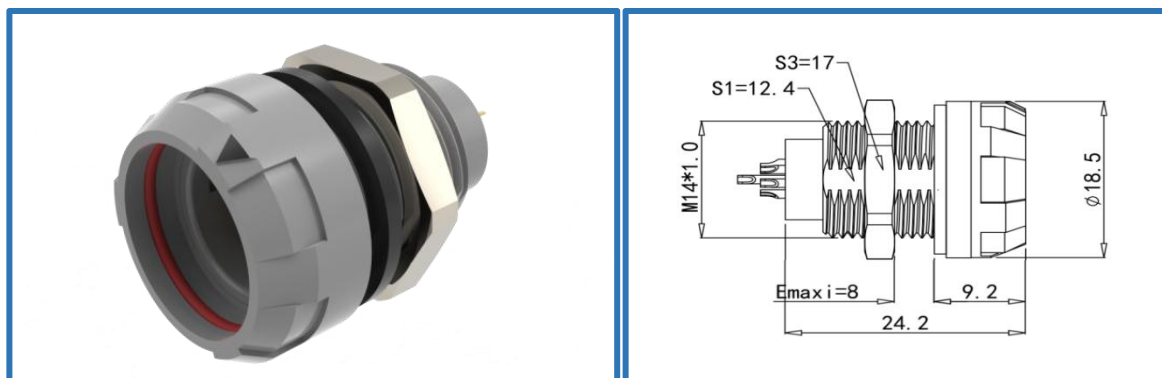
PFG Straight Plug, key (G) or keys(A,B,C) with cable collet and nut for fitting a bend relief(IP65)



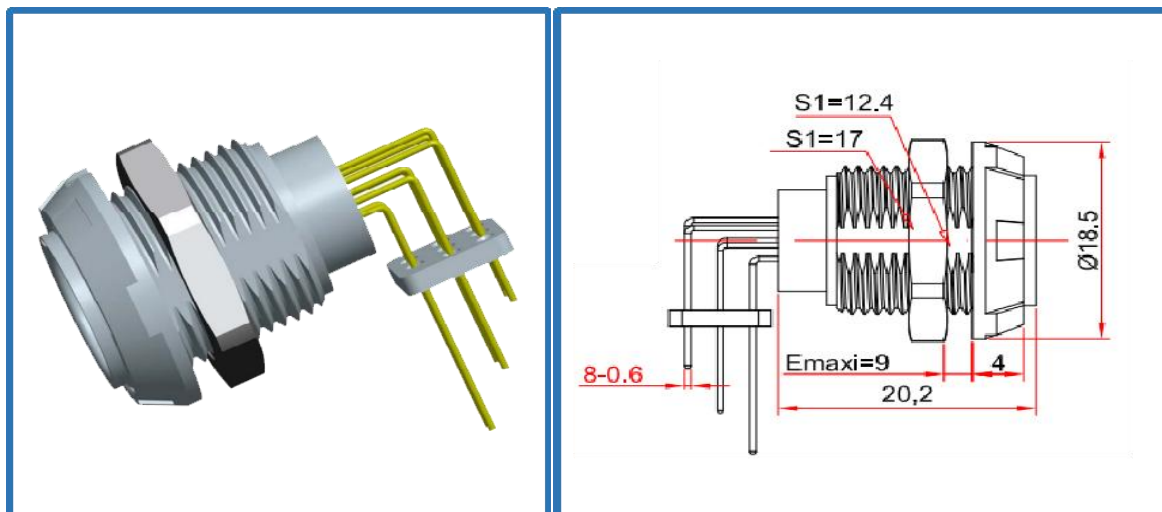
SKG Fixed Socket, key (G) or keys(A,B,C), with two nuts



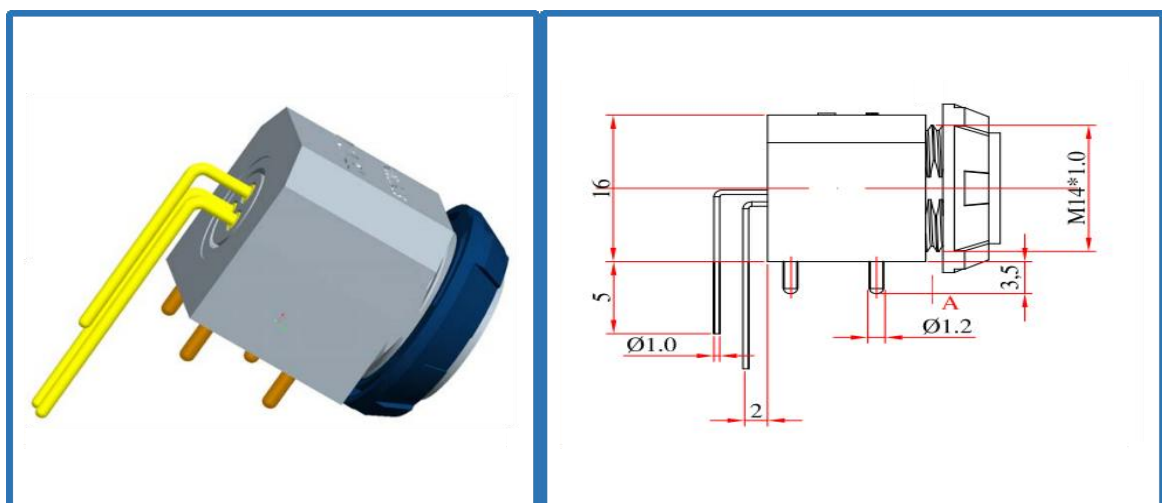
SVG Fixed Socket, key (G) or keys(A,B,C), nut fixin, IP65



SKG Fixed Socket, key (G) or keys(A,B,C), with two nuts, with 90° contacts

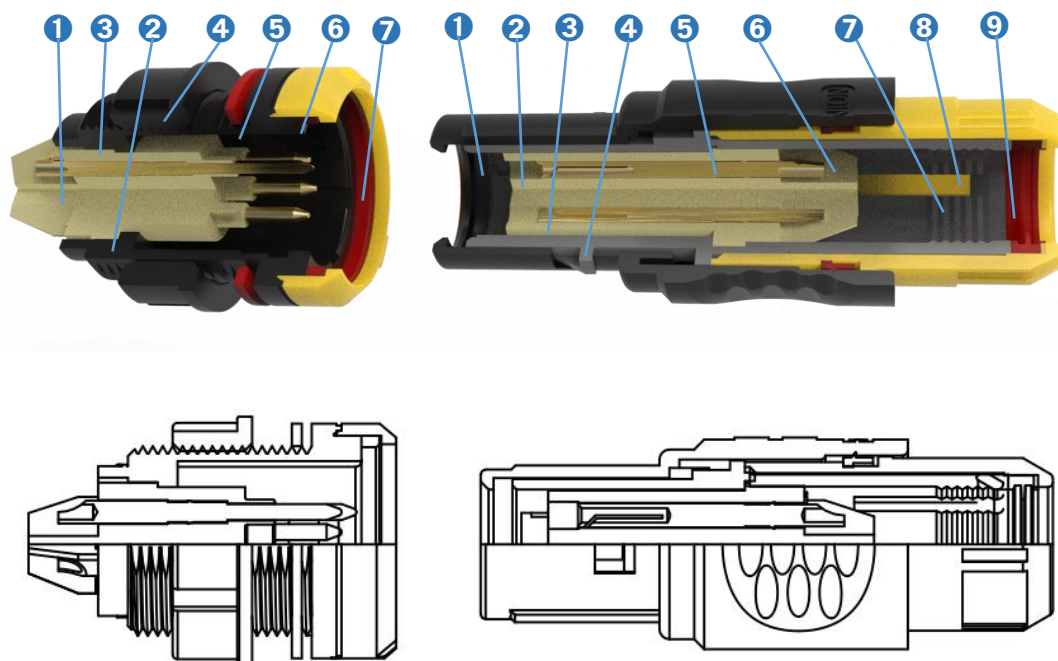


SBG Fixed Socket, key (G) or keys(A,B,C), nut fixing, PCB type



2P SERIES

Part section showing internal components



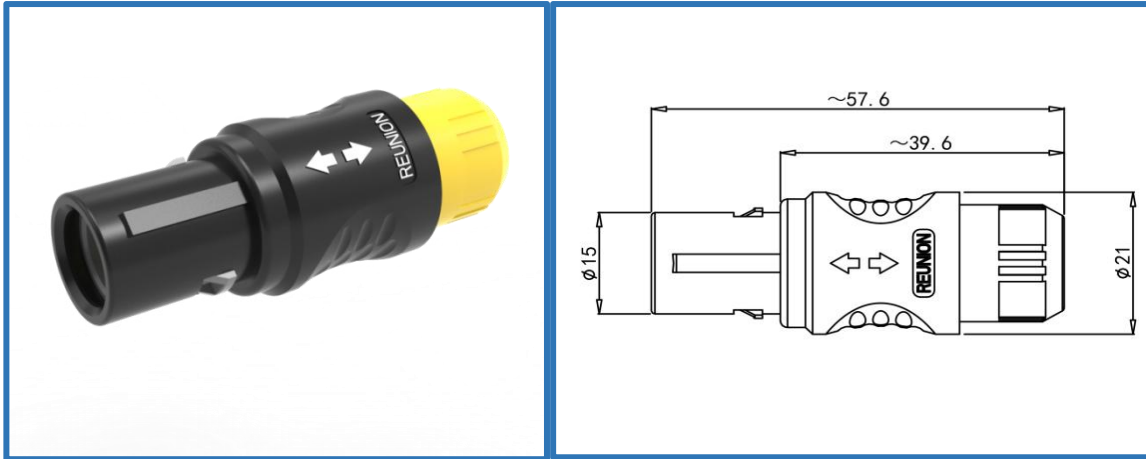
2P FIXED SOCKET

- ① 插针或插孔 Male/Female contacts
- ② 针绝缘体或孔绝缘体 Insulator
- ③ 插座壳体 Shell
- ④ 螺母 Nut
- ⑤ 插座外密封垫 Outer socket gasket
- ⑥ 插座前挡圈 Socket front retaining ring
- ⑦ 插座密封圈 Sealing ring

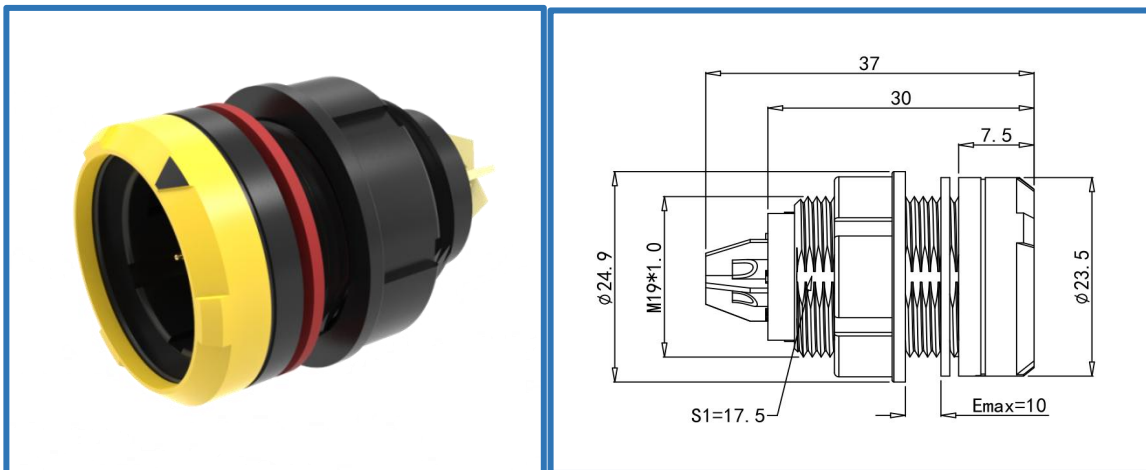
2P STRAIGHT PLUG

- ① 插头外套 Outer shell
- ② 插头内壳 Latch Sleeve
- ③ 针绝缘体或孔绝缘体 Insulator
- ④ 插针或插孔 Male/Female contacts
- ⑤ 尾部螺帽 Cap
- ⑥ O型防水夹 O type waterproof clamp
- ⑦ 电缆夹 Cable collet
- ⑧ 电缆夹压圈 Cable clamp ring
- ⑨ 电缆密封圈 Sealing ring

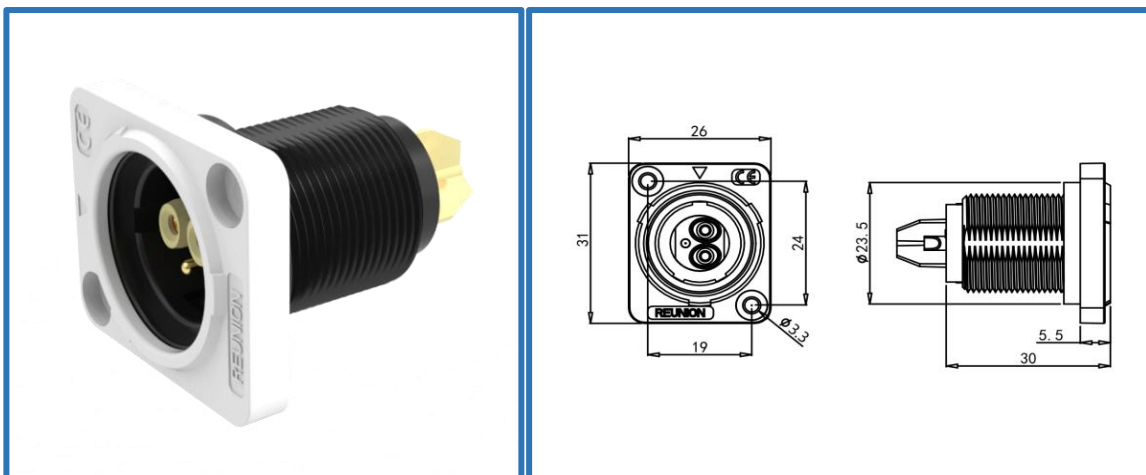
PYA. 2P Straight Plug, cable collet, key (A、B), IP65



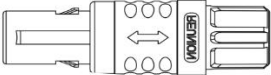

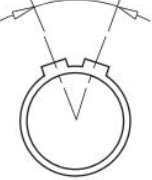


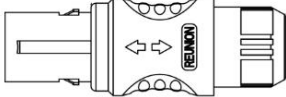




SNA. 2P Fixed Socket, nut fixing, key (A, B), IP65



SMA. 2P Fixed Socket with square flange, key (A, B), IP65



1P、2P key system

Key System	Example			
1P 	0° 	40° 	60° 	80° 
2P 				
Key Code	G	A	B	C

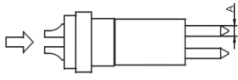

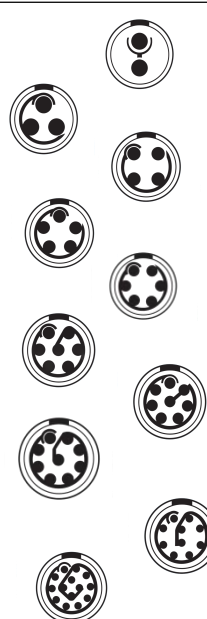
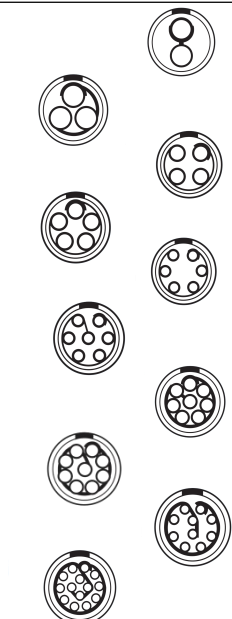
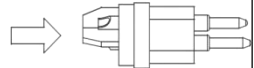
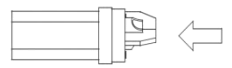
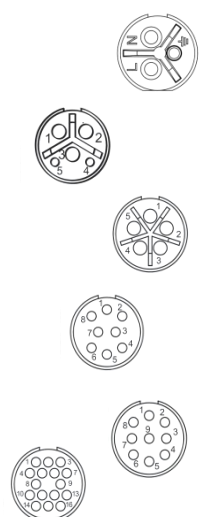
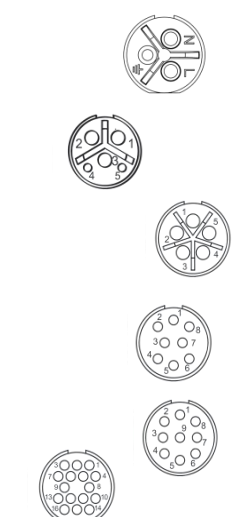
Cap and nut color type

COLOR	BLUE	WHITE	GREY	YELLOW	BLACK	RED	GREEN
CODE	B	W	G	Y	L	R	V

Cable collet(code)

CODE		CABLE DIAMETER
1P series	42	3.5~4.5
	52	4.5~5.5
	62	5.5~6.5
2P series	72	6.0~7.5
	90	7.6~9.5
	11	9.6~12

NEEDLE CORE CONFIGURATION:

Series	MALE	FEMALE	Reference	Pins	Contact ϕ (m m)	PINS TYPE			SOLDER PINS		Rated current(A)	Contact resistance (m Ω)
						Solder	Print (straight)	Print (elbow)	Test voltage (kV 1) rms Contact-contac	Working voltage(V)		
1P			302	2	1.3	I	I	I	1.2	400	14	5
			303	3	1.3	I	I	I	1.2	400	14	5
			304	4	0.9	I	I	I	1.2	350	10	6
			305	5	0.9	I	I	I	1.05	350	9	6
			306	6	0.7	I	I	I	1.05	350	7	7.5
			307	7	0.7	I	I	I	1.05	350	7	7.5
			308	8	0.7	I	I	I	1.05	350	5	7.5
			309	9	0.5	I	I	I	0.85	250	2.5	10
			310	10	0.5	I	I	I	0.85	250	2	10
			314	14	0.5	I	I	I	0.6	150	5	10
Series	FEMALE	FEMALE	Reference	Pins	Contact ϕ (m m)	PINS TYPE			SOLDER PINS		Rated current(A)	Contact resistance (m Ω)
						Solder	Print (straight)	Print (elbow)	Test voltage (kV 1) rms Contact-contac	Working voltage(V)		
2P			503	1	1.6	I	I	ç	3	1000	16	4
				2	2	I	I	ç	3	1000	22	3
			405	2	0.9	I	I	ç	1.5	500	9	7.5
				3	2	I	I	ç	2.5	800	22	3
			305	5	1.6	I	I	ç	2	650	16	4
			308	8	0.9	I	I	ç	1.5	500	9	7.5
			309	9	0.9	I	I	ç	1.5	500	9	7.5
				16	0.9	●	●	○	1.20	300	9	7.5