



HR10A series

HR10A series connectors have main features as follows:

HR10A miniature push-pull self-locking circular connector is widely used in electronic instruments, industrial cameras, visual equipment, cameras, medical equipment and so on.

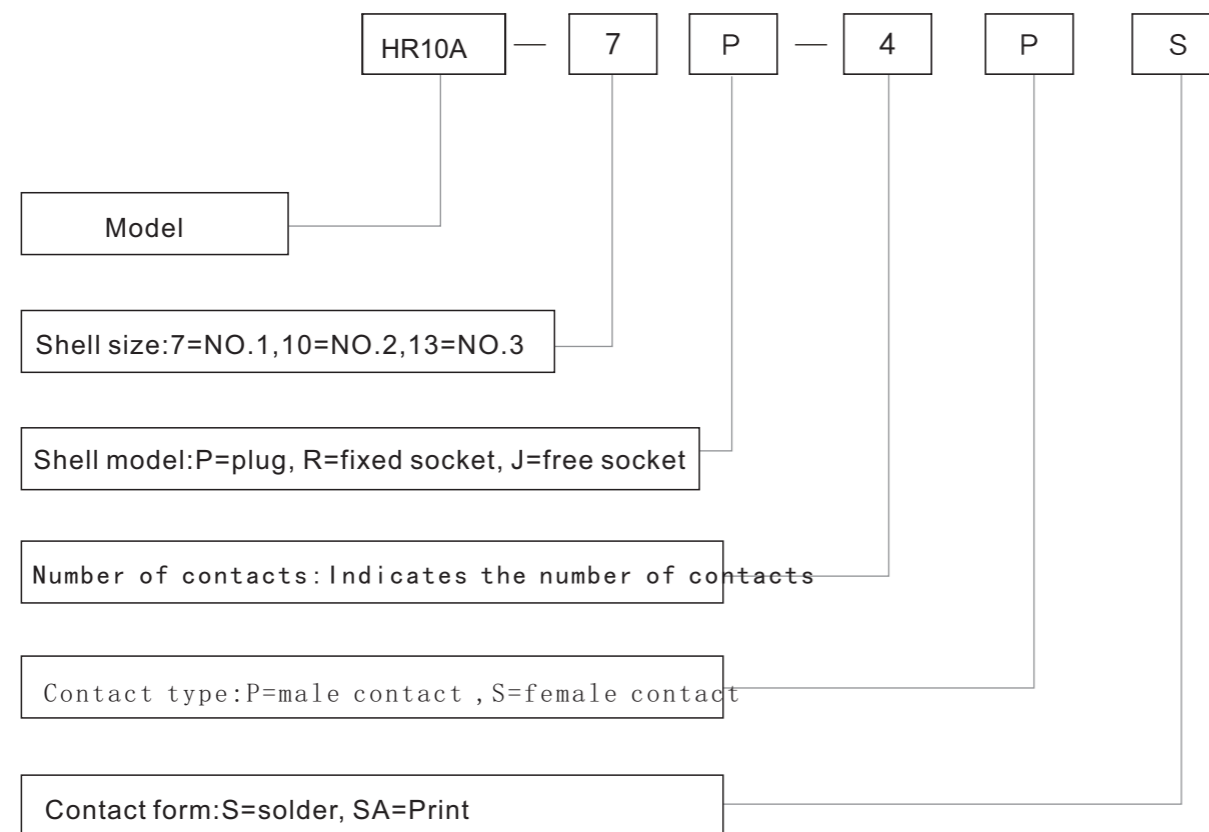
The features of the product are:

- Push-pull self-locking connection, connection separation is simple and fast. (Shell surface anti-skid design, sound prompt when self-locking).
- Exquisite self-locking device ensures firm and reliable connection.
- The use of reasonable five keys design with complete anti-blind insert function.
- Compact structure design. (Can effectively save the equipment space, the micro design of the equipment implementation).
- Nickel plated copper plug shell, nickel plated zinc alloy socket shell, PPS insulator.

Examples of Product Numbers:

- HR10A-7P-4P=NO.1 series, straight plug of 7# shell size, multipole type with 4 contacts, male solder contacts.
- HR10A-7R-4S=NO.1 series, fixed socket of 7# shell size, multipole type with 4 contacts, female solder contacts.
- HR10A-7J-4S=NO.1 series, free socket of 7# shell size, multipole type with 4 contacts, female solder contacts.

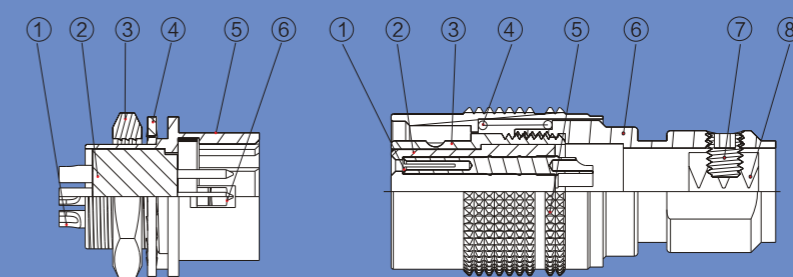
Part Numbering System of HR10A series



Part Section Showing Internal Components

Fixed socket

- ① male contact
- ② male insulator
- ③ hexagonal nut
- ④ gasket
- ⑤ shell
- ⑥ lock the shell

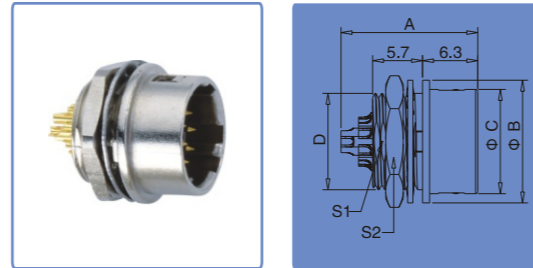


Straight plug

- ① female contact
- ② female insulator
- ③ inner shell
- ④ pressure spring
- ⑤ outer shell
- ⑥ cable sets
- ⑦ screw
- ⑧ U clamp

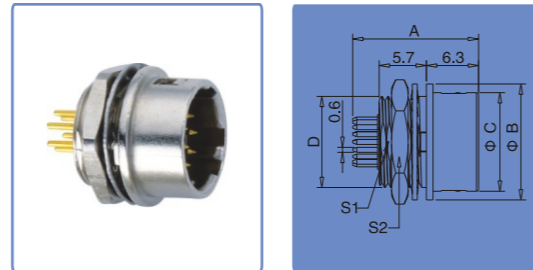
Fixed socket(solder)

Shell Size	A	B	C	D	S1	S2
1#	14	11	8.8	M8*0.5	7.2	10
2#	15.6	14	10.9	M11*0.75	10	13
3#	20.5	18	15.3	M14*1.0	13.1	17



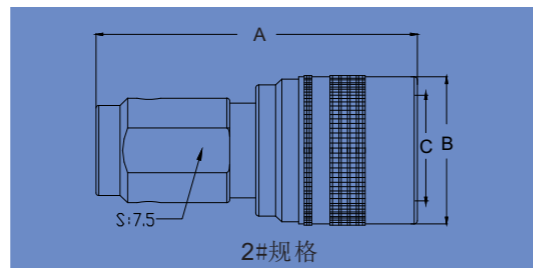
Fixed socket(print)

Shell Size	A	B	C	D	S1	S2
1#	15.5	11	8.8	M8*0.5	7.2	10
2#	15.5	14	11.9	M11*0.75	10	13
3#	20.5	18	15.3	M14*1.0	13.1	17



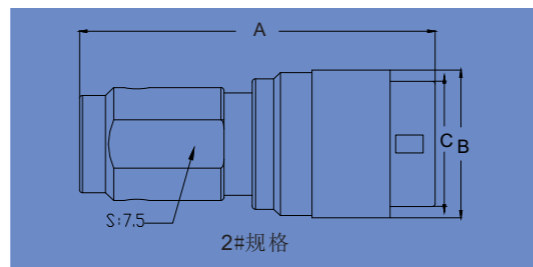
Straight plug

Shell Size	A	B	C
1#	35	11.5	8.8
2#	43	14	10.9
3#	43	19	13



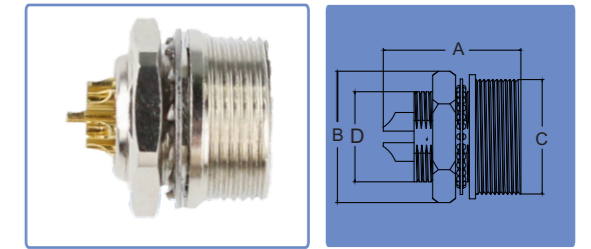
HR10A series free socket

Shell Size	A	B	C
1#	32.8	11.5	8.8
2#	43.9	14.5	11.8



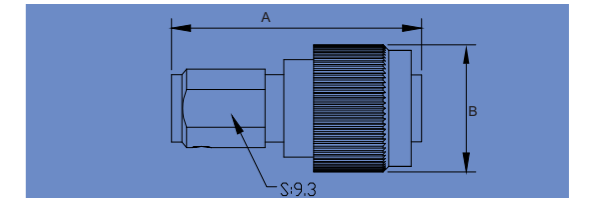
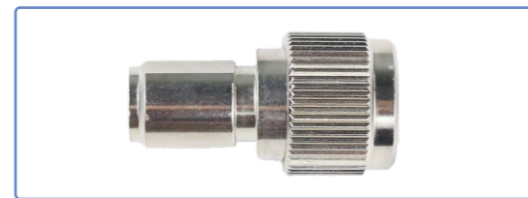
Threaded fixed socket

Shell Size	A	B	C	D
1#	14.9	11.4	M10*0.75	M8*0.5
2#	17.5	15.5	M13*0.75	M11*0.75



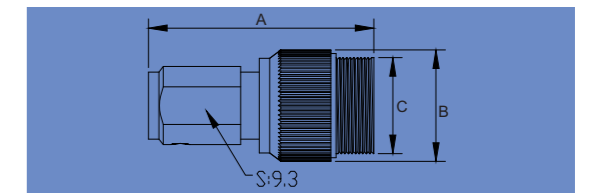
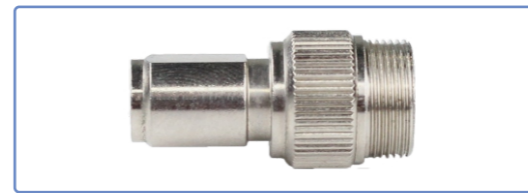
Threaded straight plug

Shell Size	A	B
1#	26.5	12
2#	32	17

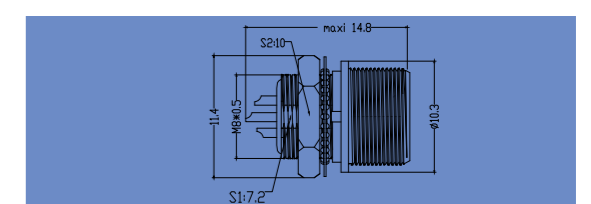


Threaded free socket

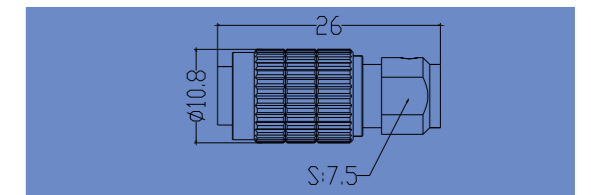
Shell Size	A	B	C
1#	26	11	M10*0.75
2#	30.5	15	M13*0.75



Threaded fixed socket(waterproof)


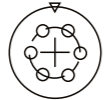
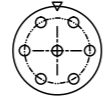
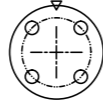
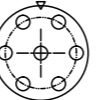
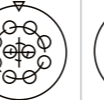
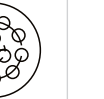



Threaded straight plug(waterproof)

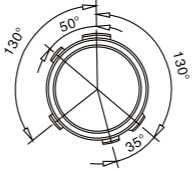


Technical parameters

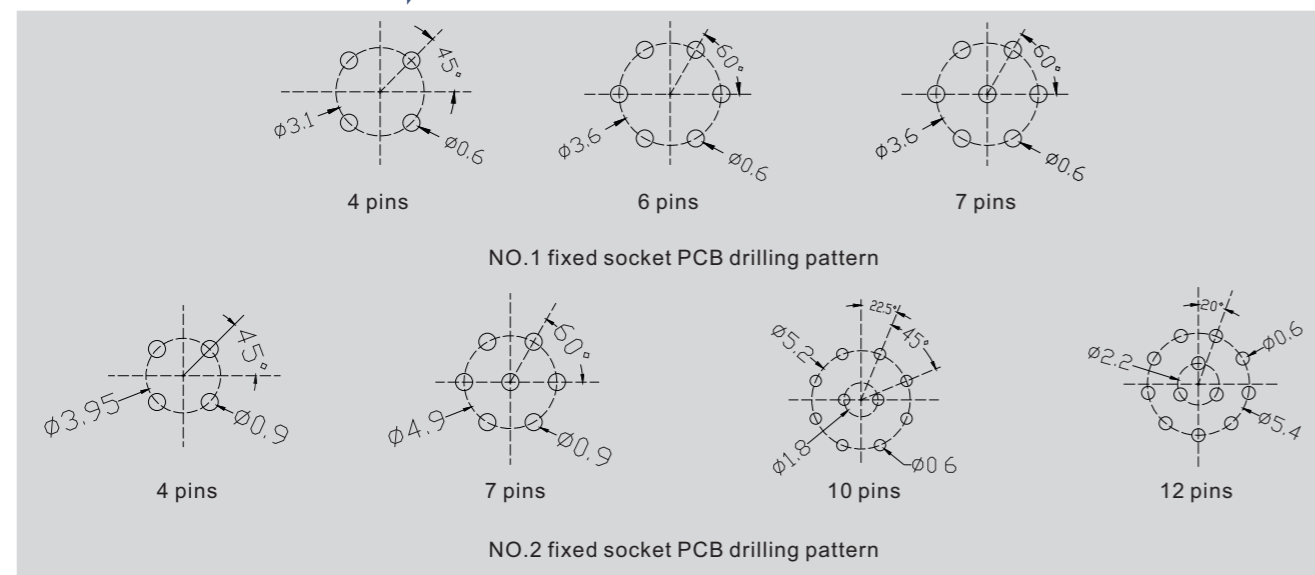
Insulator hole arrangement

NO.	Performance indicators	Shell 1#				Shell 2#			
									
1	Contact ø(mm)	0.5mm				0.9mm	0.7mm	0.5mm	
2	Adapter cable	26AWG				22AWG	24AWG	26AWG	
3	Test voltage (kV rms)	Contact -contact	0.95KV	0.80KV	0.75KV	1.45KV	1.25KV	1.15KV	0.95KV
		Contact -shell	0.80KV	0.70KV	0.65KV	1.30KV	1.35KV	1.35KV	1.25KV
4	Rated current (A)	2A				8A	7A	2A	
	Temperature range(°C)	-50°C~125°C				-50°C~125°C			
5	Endurance(cycles)	1000				1000			

Keys change

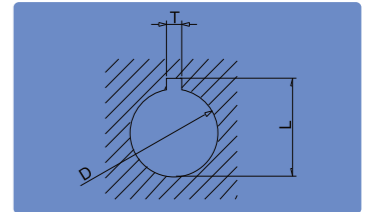
(Plug) Key	
contact of plug	Female/Male
contact of socket	Female/Male
number of contact	4、6、7、10、12

PCB drilling pattern



Panel cut-outs

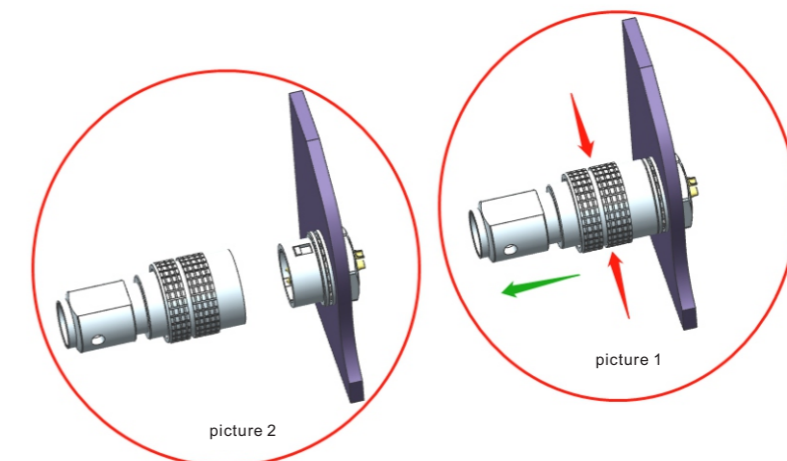
Shell Size	D	T	L
1	8.0	1.6	9.0
2	11.1	2.5	11.5
3	14.2	2.6	15.5



An illustrative

HR10A series plug and socket separation instruction

When the plug and socket are plugged in, pinch the plug shell with the pattern with your thumb and forefinger (as indicated by the red arrow in picture 1), and then pull the plug along the end of the plug (as indicated by the green arrow in picture 1) to separate it (as shown in picture 2). Note: It is not necessary to twist the plug to separate from the socket.



HR10A series plug decomposition diagram

