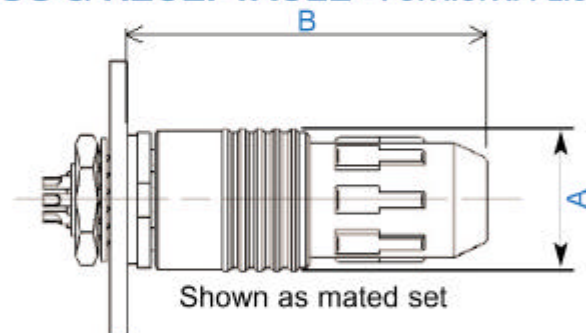


### FEATURES

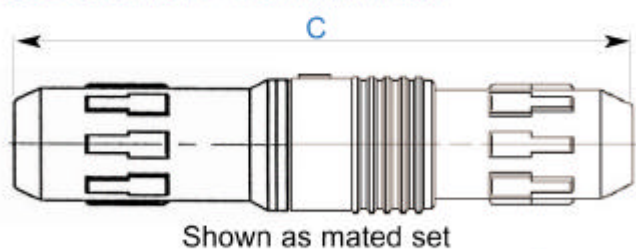
- Push pull latching.
- [Water resistant to IP67](#), for 0.5 hour at 1m depth when mated.
- Solder bucket termination for 3 & 6 positions connectors.
- Crimp contacts for 10 & 12 positions.
- Simple screw together assembly requires no special tooling.
- Plastic shells and stainless steel springs make HR30 totally resistant to corrosion.
- Designed to withstand 1000 mating cycles.
- Five key polarisation.
- Gold contacts.
- Connectors have white arrows for easy alignment.
- Current rating 2 amps for 6, 10 & 12 position, 5 amps for 3 position.
- Optional dust caps.



### PLUG & RECEPTACLE - FOR I.O. APPLICATIONS

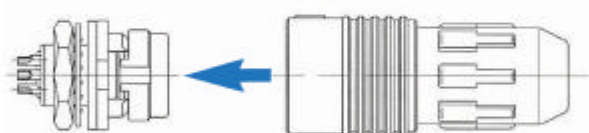


### PLUG & JACK - FOR INLINE USE



	A	B	C
3 Position	12.6	32.3	-
6 Position	12.6	32.3	52.8
10 & 12 Position	15.5	42.0	70.3

Push-pull lock mechanism with easy operation.



Easy mating white indexing mark



### TYPICAL APPLICATIONS

Portable electronics for outdoor use, marine equipment, medical equipment, test equipment, radio communications.

## PRODUCT SPECIFICATIONS

Rated Current 2A (5A for 3 position)	Operating Temperature Range -25°C ~ +85°C
Rated Voltage AC 100V / DC 140V	Storage Temperature Range -25°C ~ +85°C

1. Contact Resistance	Measured at DC 1A	15mΩ max
2. Insulation Resistance	Measured at DC 100V	1000MΩ max
3. Withstand Voltage	AC 300V applied for 1 minute	No short or insulation breakdown
4. Resistance to Vibration	10~55~10Hz/cycle, either amplitude 0.75mm in 3 directions for 5 minute/cycle, 10 cycles, respectively	Instantaneous disconnection, less than 10μs
5. Mating Cycles	1000 cycles	Contact resistance : 30mΩ max
6. Thermal Cycle	-55°C : 30 minutes ▶ room temperature 10~15 minutes ▶ +85°C : 30 minutes ▶ room temperature 10~15 minutes; 5 cycles	Insulation resistance : 100MΩ min
7. Resistance to Moisture	Temperature 40°C, humidity 90~95% for 96 hours	Insulation resistance : 10MΩ min (at high moisture) 100MΩ min (dry)
8. Water Resistant	Submerged in 1m water depth for 0.5 hours when mated.	No water ingress

## MATERIAL

	Item	Material	Treatment	Remark
Plug	Housing & Insulation	PPS Resin (black)		UL94V-0
		PBT Resin (black)		UL94V-0
		Polyacetal Resin (natural)		-
	Seal	Synthetic Rubber (red & black)		-
	Female Terminal	Phosphor Bronze	Gold Plating	-
	Spring	Stainless Steel		-
Receptacle	Insulation	PPS Resin (black)		UL94V-0
	Seal	Synthetic Rubber (black)		-
	Female Terminal	Brass	Gold Plating	-
	Hexagonal Nut	Steel	Chromate Treatment	-
	Washer	Phosphor Bronze	Nickel Plating	-

## PART NUMBER CONFIGURATION

Using this configuration, please determine the specific product.

**HR30 - 7P - 10SC**  
①
② ③
④ ⑤ ⑥

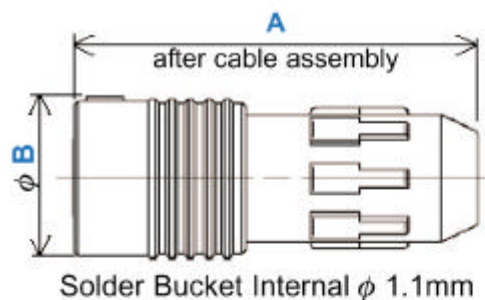
① Series name : HR30 series	④ Number of contacts : 3, 6, 10, 12 contacts
② Shell size : Plug matng area diameter mm	⑤ Terminal type : S - Female terminal : P - Male terminal
③ Connector type : P - Plug : R - Receptacle : J - Jack	⑥ Crimp housing : Order contacts separately

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## **PLUG**

HR30-6P-6S CL No. 130-0010-4

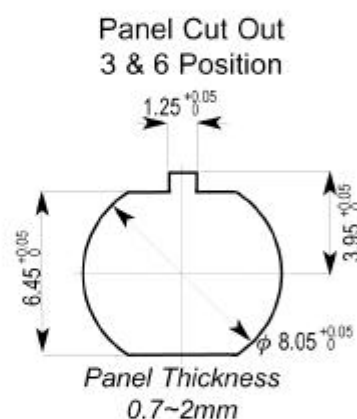
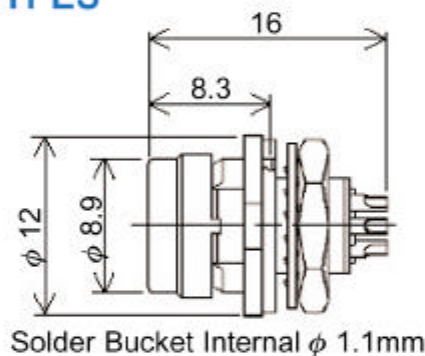


CL No	Part No	No of Contacts	A	B	Cable Dia	Applicable Contact
130-0004-1	HR30-6P-3S	3	29.8	12.6	4.2~5.0	Solder bucket
130-0009-5	HR30-6P-6P	6	29.8	12.6	4.2~5.0	Solder bucket
130-0010-4	HR30-6P-6S	6	29.8	12.6	4.2~5.0	Solder bucket
130-0013-2	HR30-7P-10SC	10	39.8	15.5	6.2~7.0	HR30-SC-211
130-0014-5	HR30-7P-12SC	12	39.8	15.5	6.2~7.0	HR30-SC-212
130-0015-8	HR30-8P-12PC	12	39.8	15.5	6.2~7.0	HR30-PC-211

Solder bucket will accept 26 AWG max.

## **RECEPTACLE SOLDER TYPES**

HR30-6R-6P CL No. 130-1009-0



CL No	Part No	No of Contacts	Applicable Contact
130-1003-4	HR30-6R-3P	3	Solder bucket
130-1008-8	HR30-6R-6S	6	Solder bucket
130-1009-0	HR30-6R-6P	6	Solder bucket

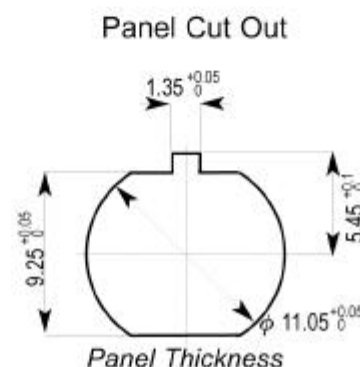
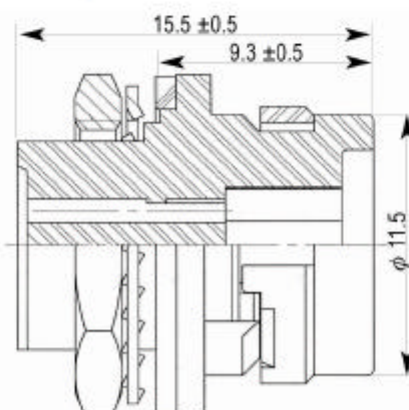
Solder bucket will accept 26 AWG max.

## **RECEPTACLE CRIMP**

HR30-7R-10PC CL No. 130-1012-5



Shown with crimp contacts fitted



CL No	Part No	No of Contacts	Applicable Contact
130-1012-5	HR30-7R-10PC	10	HR30-PC-211
130-1014-0	HR30-8R-12SC	12	HR30-SC-211
130-1013-8	HR30-7P-12PC	12	HR30-PC-211

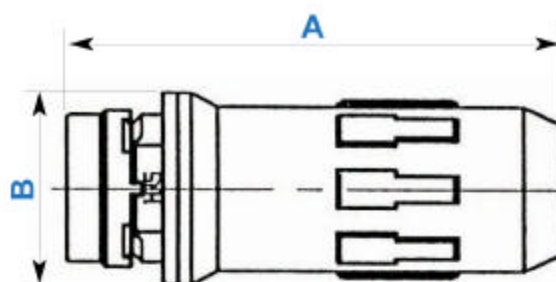
## JACKS SOLDER & CRIMP TYPES

HR30-7J-10PC

CL No. 130-2015-9



Shown with crimp contacts fitted



Recommended Torque 0.8Nm for 10 & 12 position  
0.5Nm for 6 position

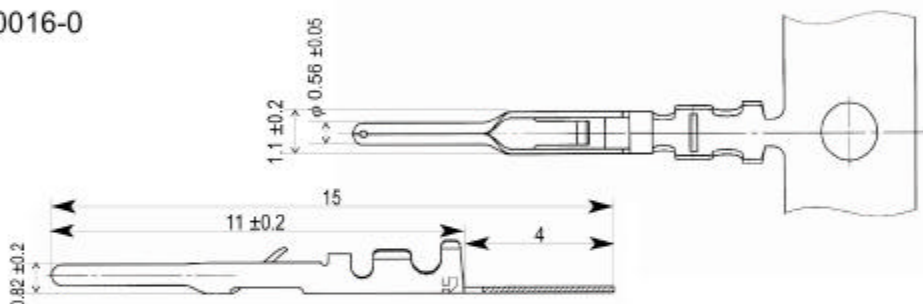
CL No	Part No	No of Contacts	A	B	Cable Dia	Applicable Contact	Mating Connector
130-2009-6	HR30-6J-6P	6	28.8	12.0	6.2 - 7.0mm	Solder Bucket	HR30-6P-6S
130-2015-9	HR30-7J-10PC	10	38.0	15.3	6.2 - 7.0mm	HR30-PC-211	HR30-7P-10SC
130-2016-1	HR30-8J-12SC	12	38.0	15.3	6.2 - 7.0mm	HR30-SC-211	HR30-8P-12PC
130-2017-4	HR30-7J-12PC	12	38.0	15.3	6.2 - 7.0mm	HR30-PC-211	HR30-7P-12SC

Solder bucket will accept 26 AWG max.

## CRIMP CONTACTS

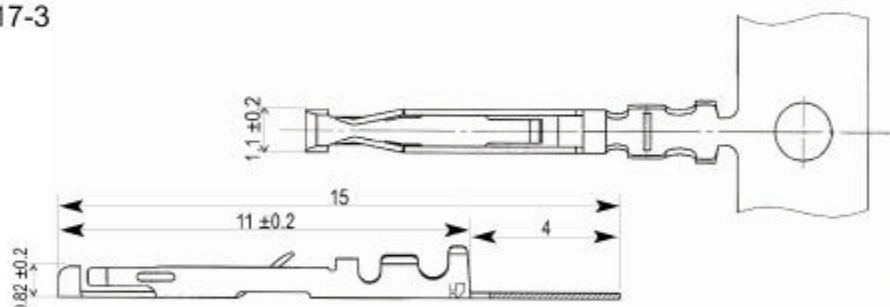
HR30-PC-211

CL No. 130-0016-0



HR30-SC-211

CL No. 130-0017-3



CL No	Part No	Wire Type	Qty
130-0017-3	HR30-SC-211	26~30 AWG	10,000 Reel
130-0016-0	HR30-PC-211	26~30 AWG	10,000 Reel
150-0229-6	HT102/HR30-1	Hand Crimp Tool	1

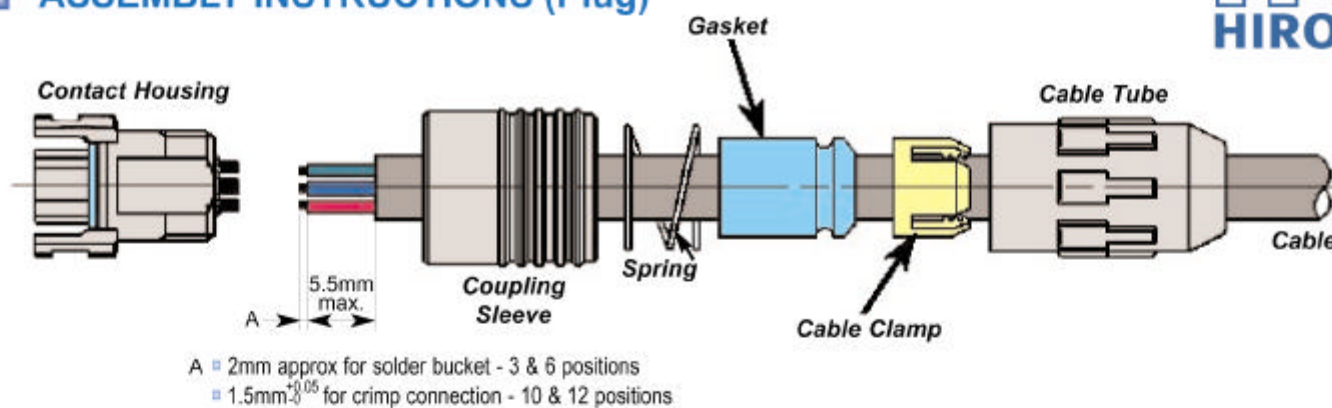
### Notes

- Maximum insulation diameter 1.0mm.
- Recommended strip length 1.5mm (+0.5mm, -0).
- Hand crimp tool will terminate male and female contacts.
- For semi auto applicator, please contact the sales office.

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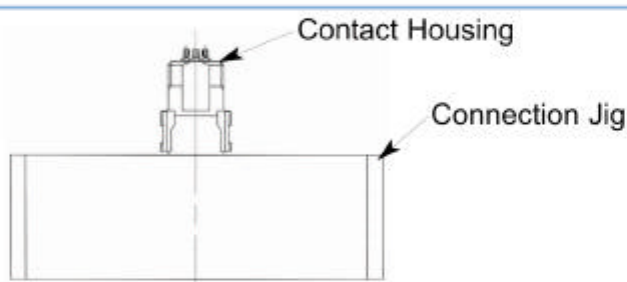


## ASSEMBLY INSTRUCTIONS (Plug)



### Procedure

- 1) Thread the cable tube, cable clamp, gasket, spring and coupling sleeve onto the cable in the correct order. Prepare the cable as shown above.



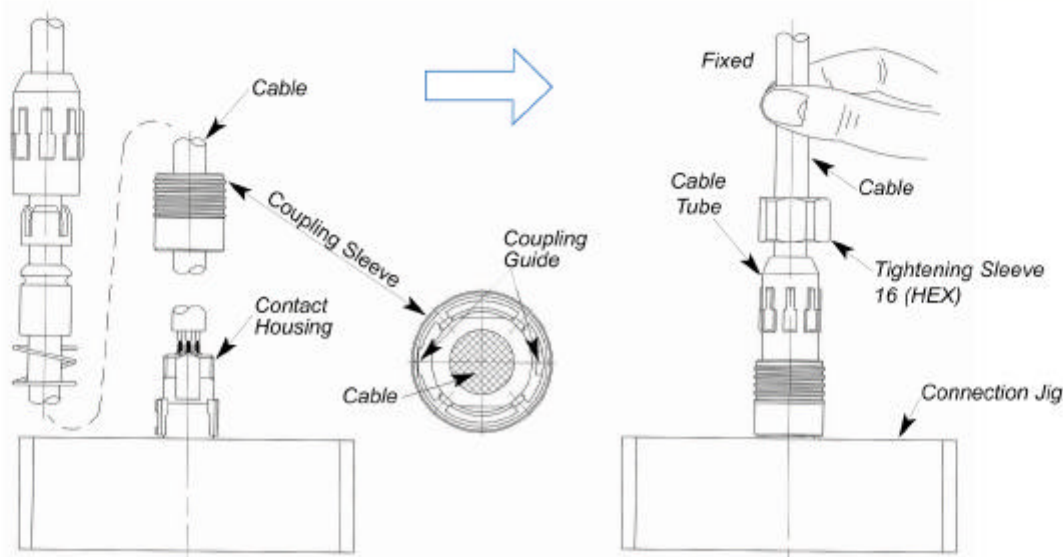
### 2) Solder Versions

Locate the contact housing onto the connection jig and solder the wires into position using a soldering iron temperature of  $280^{\circ}\text{C} \pm 10^{\circ}\text{C}$  for 3 - 4 seconds. Note: The wire diameter should not exceed 0.7mm after tinning of wire.

### Crimp Versions

Crimp the contact onto each wire using HT102/HR30-1 hand tool. Push the contact into the contact housing ensuring that each contact 'clicks' into place.

- 3) Align and fit coupling sleeve onto the contact housing, then slide the other components down the cable. Tighten the cable tube to 0.5Nm for 3 & 6 position, 0.8Nm for 10 & 12 positions, using the appropriate tightening sleeve.



## DUST CAPS



Part No	CL No	Applicable Connector
HR30-6R-C	130-3001-7	HR30-6R-3P HR30-6R-6P HR30-6J-6P HR30-6R-6S
HR30-6P-C	130-3000-7	HR30-6P-3S HR30-6P-6S HR30-6P-6P
HR30-7R-C	130-3002-2	HR30-7R-10PC HR30-7J-10PC HR30-7R-12PC HR30-7J-12PC
HR30-7P-C	130-3004-8	HR30-7P-10SC HR30-7P-12SC
HR30-8P-C	130-3003-5	HR30-8P-12PC

## APPLICABLE TOOLING

### Notes

The connection jig is convenient when having to assemble or disassemble the plugs. The solder connection jig is used for the receptacle when making a solder connection.



HR30-6P-6S-T01



HR30-6R-6P-T01



Tightening Sleeve  
HR30-6P-T02

## TOOLING PART NUMBERS

Description	Part No	CL No	Applicable Connector
Connection Jig	HR30-6P-3S-T01	150-0220-1	HR30-6P-3S
Connection Jig	HR30-6R-3P-T01	150-0225-5	HR30-6R-3P
Connection Jig	HR30-6P-6S-T01	150-0214-9	HR30-6P-6S
Connection Jig	HR30-6P-6P-T01	150-0221-4	HR30-6P-6P
Connection Jig	HR30-6R-6S-T01	150-0227-7	HR30-6R-6S
Connection Jig	HR30-6R-6P-T01	150-0218-0	HR30-6R-6P HR30-6J-6P
Connection Jig	HR30-7P-10SC-T01	150-0228-3	HR30-7P-10SC
Connection Jig	HR30-7J-10PC-T02	150-0231-8	HR30-7J-10PC
Connection Jig	HR30-8P-12PC-T01	150-0227-0	HR30-8P-12PC
Connection Jig	HR30-7P-12SC-T01	150-0223-0	HR30-7P-12SC
Connection Jig	HR30-8J-12SC-T01	150-0226-8	HR30-8J-SC
Connection Jig	HR30-7J-12PC-T01	150-0230-5	HR30-7J-12PC
Contact Extraction Tool	HR30-TP	150-0219-2	HR30-SC-211 HR30-PC-211
Tightening Sleeve	HR30-8P-T02	150-0224-2	HR30-8P or J HR30-7P or J
Tightening Sleeve	HR30-6P-T02	150-0216-4	HR30-6P-*
Hand Crimp Tool	HT102/HR30-1	150-0229-6	HR30-SC-211 HR30-PC-211

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