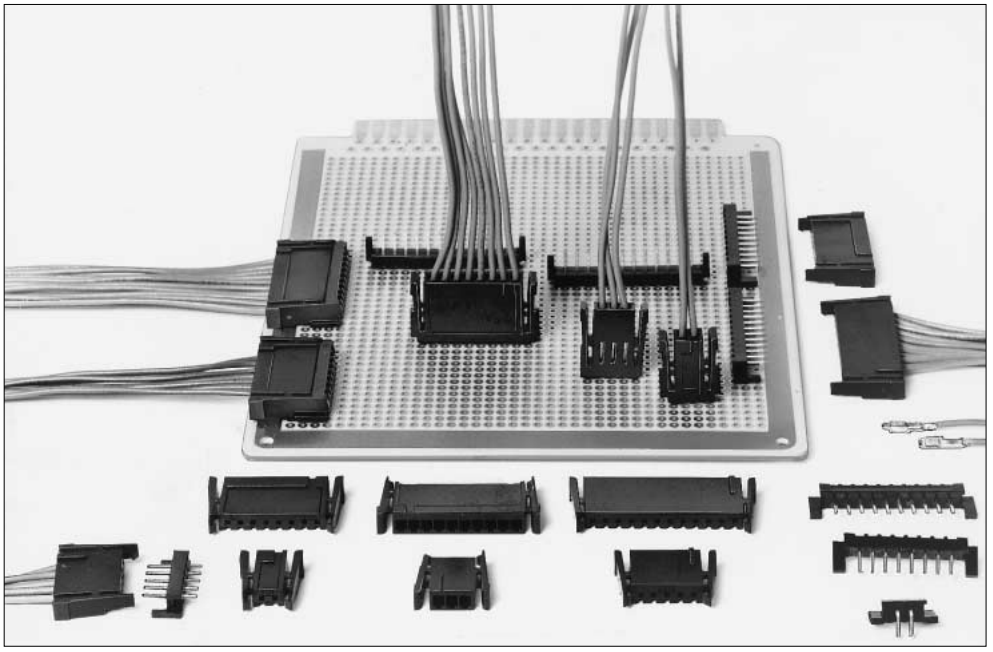
2.5mm Pitch Connector for Discrete Wire Connection

HNC Series



■Features

1. Full Lock Mechanism

The connector is equipped with the full lock mechanism so as not be removed, unless locks are reset on both sides. This mechanism is activated effectively to prevent cable hooking or mis-insertion.

2. Thin Type Connector

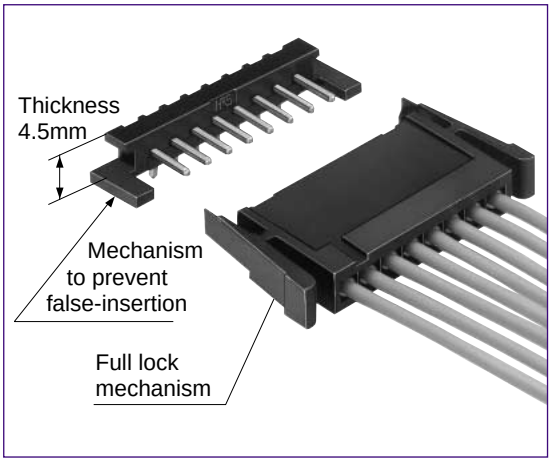
Mounting height when the connector is used at the right angle : **4.5mm**

3. Mechanism to Prevent Mis-insertion

This thin type connector is equipped with the mechanism to prevent mis-insertion.

4. Tin Plating and Gold Plating Variation

Two kinds of tin plating and gold plating types are available, and can be chosen according to application. The tin plating is also set to a light operating touch.



■Applications

Various business equipment, financial terminals

■Product Specifications

Rating	Rated Current (Note1)	AWG 22 : 3A AWG 24 : 3A AWG 26 : 2A AWG 28 : 1A AWG 30 : 0.5A	Operating Temperature Range Operating Moisture Range	-25～+85℃ (Note2) 40～80%
	Rated Voltage	250V AC	Storage Temperature Range Storage Moisture Range	-10～+60℃ (Note3) 40～70% (Note3)

Item	Specification	Condition
1. Insulation Resistance	1000MΩ min.	Measured at 500V DC
2. Withstand voltage	Neither short or breakdown	1000V AC for 1 minute
3. Contact Resistance	30mΩ Max	Measured at 1A
4. Insertor/Extraction Force	0.4N (40gf) min.,4.4N (450gf) max.	Measure at the square steel pin of 0.635±0.002mm
5. Vibration	Electrical discontinuity, 1μS max.	10~55Hz and single amplitude 0.75mm in 3 directions for 2 hours, respectively.
6. Moisture Resistance	Contact resistance: 10mΩ max.Insulation resistance: 1000MΩ min.	Exposed to temperature 40±2℃ and humidity 90~95% for 96 hours
7. Temperature Cycle	Contact resistance: 10mΩ max:Insulation resistance: 1000MΩ min.	(-25℃: 30 minutes → 5~35℃: 10 minutes 85℃: 30 minutes → 5~35℃: 10 minutes) 5 cycles
8. Operating Life	Contact resistance: 20mΩ max.	Tin plating : 30 cycles Gold plating : 50 cycles
9. Resistance to Soldering heat	No resin area fusion to degrade performance	Reflow : 250℃ for 5 seconds Manual soldering: Soldering iron temperature: 300℃ for 2 seconds

Note1: The rated current will be changed according to cable sizes for use. The header rating only t is 3A.
Note2: Temperature rise included when energized
Note3: This storage indicates a long-term storage state for the unused product before the board mounted.
The operating temperature and moisture ranges are applied to the non-energized state after the connector has been installed to the board.
Note4: The above standards represent this series. Individual formal agreement should be based on the "Specification".

■Material

Product	Part	Material	Finish	Remarks
Crimping Socket	Insulator	Polyamide	Black	UL94V-0
Contact	Contact	Phosphor Copper	Tin plating or gold plating	———
Pin Header	Insulator	Polyamide	Black	UL94V-0
	Contact	Brass	Tin plating or gold plating	———

■Ordering Information

Please determine the specific product. If needed, please order the product the product from the product No. as listed on catalog page B137 to B140.

●Crimping Plug

HNC 2 - 2.5 P - ＊ DSL
q w e r t y

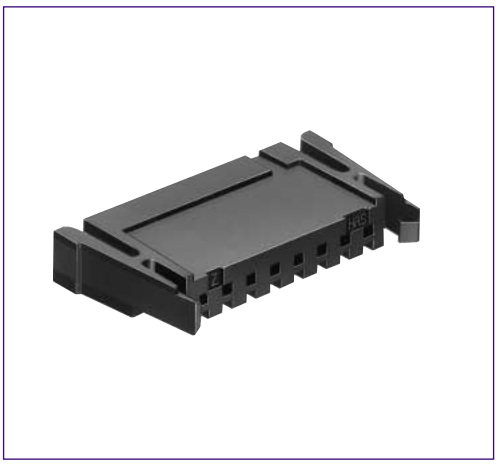
q Series Name : HNC	**t** Number of Contacts : 2～16, 18, 20
w Series No. : 2, 1	**y** Contact Type None : Crimping socket DS : Straight dip DSL : Right angle dip
e Contact Pitch : 2.5mm	
r Connector Type S : Socket P : Pin Header	

●Contact

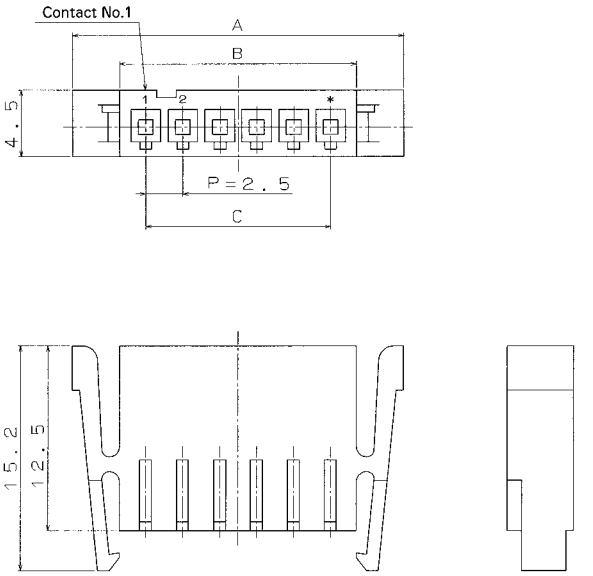
HNC2 - 2.5S - C - A
q w e

q Type: 2.5mm pitch socket	**e** Applicable cable size A : AWG22~26 B : AWG26~30
w Packaging Type C : Reel PC : Bag	

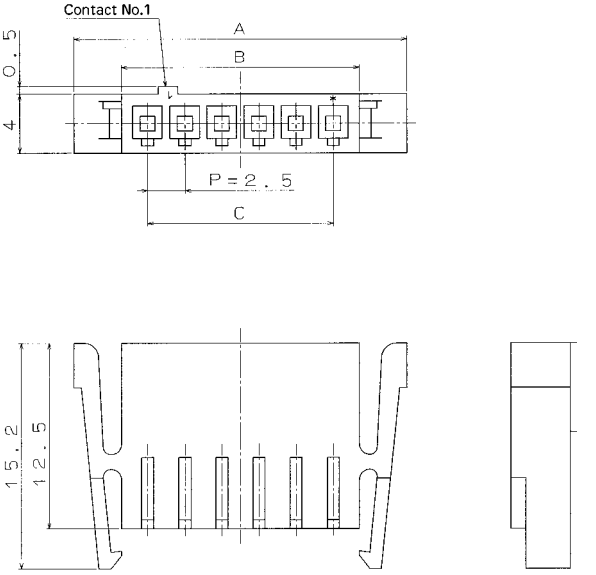
■Crimping Socket



[Figure 1]



[Figure 2]



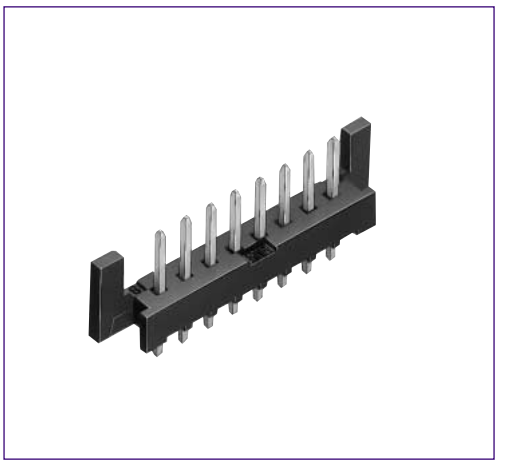
Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	Dimensions
HNC2-2.5S- 2(※※)	CL218-0011-1-※※	2	12.4	6	2.5	Figure 1
HNC2-2.5S- 3(※※)	CL218-0022-8-※※	3	14.9	8.5	5	
HNC2-2.5S- 4(※※)	CL218-0039-0-※※	4	17.4	11	7.5	
HNC2-2.5S- 5(※※)	CL218-0027-1-※※	5	19.9	13.5	10	
HNC2-2.5S- 6(※※)	CL218-0042-5-※※	6	22.4	16	12.5	
HNC2-2.5S- 7(※※)	CL218-0030-6-※※	7	24.9	18.5	15	
HNC2-2.5S- 8(※※)	CL218-0014-0-※※	8	27.4	21	17.5	
HNC2-2.5S-10(※※)	CL218-0017-8-※※	10	32.4	26	22.5	
HNC1-2.5S-12(※※)	CL218-0008-7-※※	12	37	31	27.5	Figure 2
HNC2-2.5S-15(※※)	CL218-0045-3-※※	15	44.9	38.5	35	Figure 1

[Specific No.] –＊＊, (＊＊)
None :Bag packaging

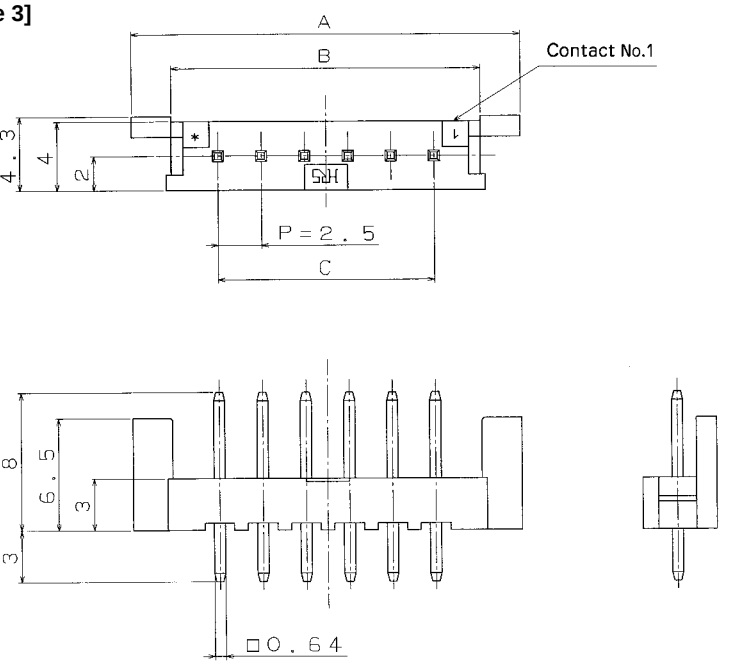
Note1: Please order a quantity multiplied by 100 pcs. (Not per bag, but per pcs.)
Note2: The series name of 12 contacts connector is HNC1, and partially will be changed in the style.

■Straight Pin Header

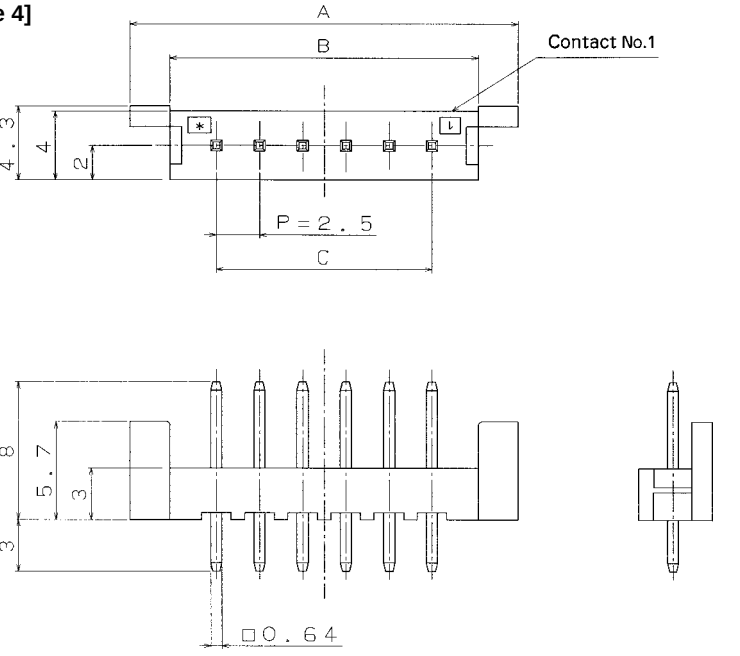


●Board Through-hole Diameter: ø1.1$^{+0.1}_{0}$

[Figure 3]



[Figure 4]



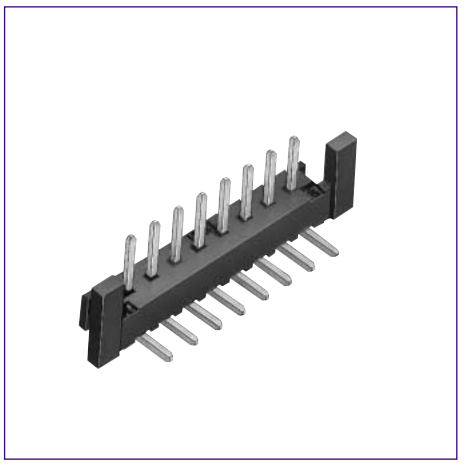
Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	Specific No.		Dimensions
						Tin plating	Gold plating	
HNC2-2.5P- 2DS(※※)	CL218-0012-4-※※	2	12.5	7.8	2.5	Number: None	02	Figure 3
HNC2-2.5P- 3DS(※※)	CL218-0023-0-※※	3	15	10.4	5	Number: None	02	
HNC2-2.5P- 4DS(※※)	CL218-0040-0-※※	4	17.5	12.9	7.5	Number: None	01	
HNC2-2.5P- 5DS(※※)	CL218-0028-4-※※	5	20	15.4	10	Number: None	02	
HNC2-2.5P- 6DS(※※)	CL218-0043-8-※※	6	22.5	17.9	12.5	Number: None	01	
HNC2-2.5P- 7DS(※※)	CL218-0031-9-※※	7	25	20.4	15	Number: None	02	
HNC2-2.5P- 8DS(※※)	CL218-0015-2-※※	8	27.5	22.8	17.5	Number: None	02	
HNC2-2.5P-10DS(※※)	CL218-0018-0-※※	10	32.5	27.8	22.5	Number: None	02	
HNC1-2.5P-12DS(※※)	CL218-0009-0-※※	12	35.5	32.8	27.5	Number: None	02	Figure 4
HNC2-2.5P-15DS(※※)	CL218-0046-6-※※	15	45	40.4	35	Number: None	01	Figure 3

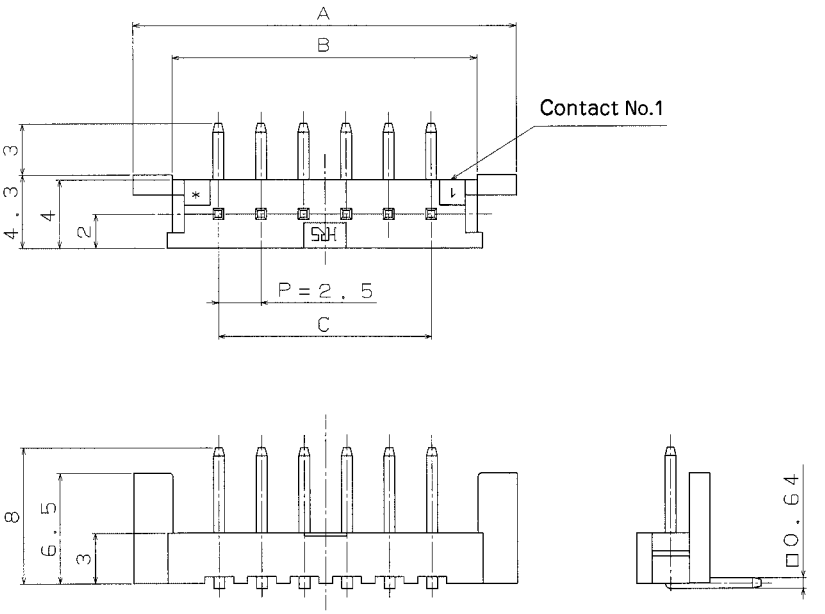
Note1: Please order a quantity multiplied by 100 pcs. (Not per bag, but per piece)
Note2: The series name of the 12 contacts connector is HNC1 and the style will be partially changed.

■Right Angle Pin Header

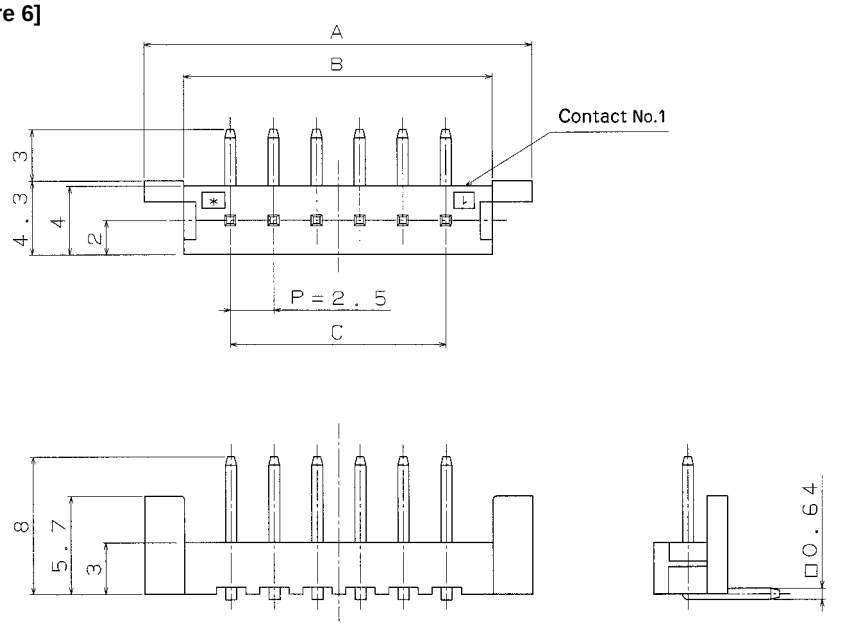
[Figure 5]



●Board Through-hole Diameter: ø1.1$^{+0.1}_{0}$



[Figure 6]

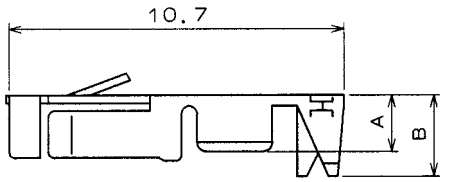


Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	Specific No.		Dimensions
						Tin plating	Gold plating	
HNC2-2.5P- 2DSL(※※)	CL218-0013-7-※※	2	12.5	7.8	2.5	Number: None	02	Figure 5
HNC2-2.5P- 3DSL(※※)	CL218-0024-3-※※	3	15	10.4	5	Number: None	02	
HNC2-2.5P- 4DSL(※※)	CL218-0041-2-※※	4	17.5	12.9	7.5	Number: None	01	
HNC2-2.5P- 5DSL(※※)	CL218-0029-7-※※	5	20	15.4	10	Number: None	02	
HNC2-2.5P- 6DSL(※※)	CL218-0044-0-※※	6	22.5	17.9	12.5	Number: None	01	
HNC2-2.5P- 7DSL(※※)	CL218-0032-1-※※	7	25	20.4	15	Number: None	02	
HNC2-2.5P- 8DSL(※※)	CL218-0016-5-※※	8	27.5	22.8	17.5	Number: None	02	
HNC2-2.5P-10DSL(※※)	CL218-0019-3-※※	10	32.5	27.8	22.5	Number: None	02	
HNC1-2.5P-12DSL(※※)	CL218-0010-9-※※	12	35.5	32.8	27.5	Number: None	02	Figure 6
HNC2-2.5P-15DSL(※※)	CL218-0047-9-※※	15	45	40.4	35	Number: None	01	Figure 5

Note1: Please order a quantity multiplied by 100 pcs. (Not per bag, but per piece)
Note2: The series name of the 12 contacts connector is HNC1 and the style will be partially changed.

■Crimping Contact for Socket



●Applicable Cable (Tin Plated Annealing Copper Wire)

Conductor Size (Contact wire construction)	Jacket Diameter
AWG 22 (17pieces. /0.16mm)	φ1.35～φ1.7mm
AWG 24 (11pieces. /0.16mm)	
AWG 26 (7pieces. /0.16mm)	
AWG 28 (7pieces. /0.127mm)	φ1.0～φ1.35mm
AWG 30 (7pieces. /0.1mm)	

Note: If other cables are used instead of the applicable cable, please contact Hirose sales department.

●Recommended Cable

UL1061, UL1007

●Strip Length

2.8～3.3mm

Unit: mm

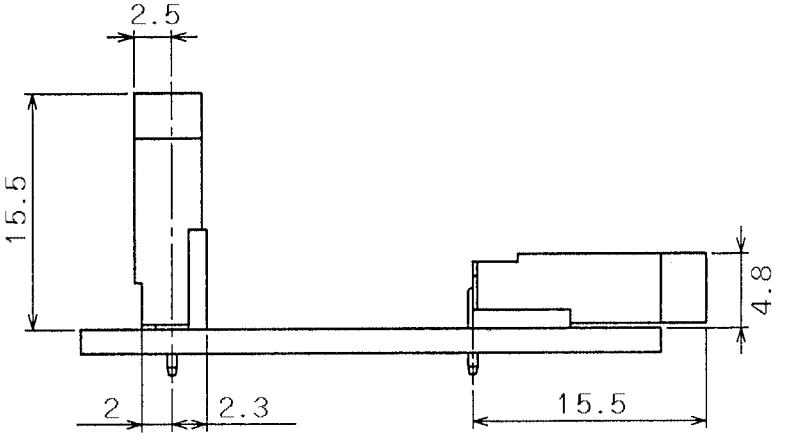
Product No.	HRS No.	Conductor Size	Jacket Diameter	A	B	Packaging Type	Quantity	Specific No.	
								Tin plating	Gold plating
HNC-2.5S-D-A(※※)	CL218-0037-5-※※	AWG 22～26	φ1.35～1.7mm	1.8	2.6	Reel	100	Number: None	02
HNC-2.5S-C-A(※※)	CL218-0021-5-※※			1.8	2.6	bag	10,000		
HNC-2.5S-D-B(※※)	CL218-0038-8-※※	AWG 26～30	φ1.0～1.35mm	1.5	1.7	Reel	100		
HNC-2.5S-C-B(※※)	CL218-0020-2-※※			1.5	1.7	bag	10,000		

■Applicable Crimping Tool

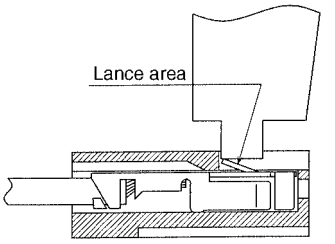
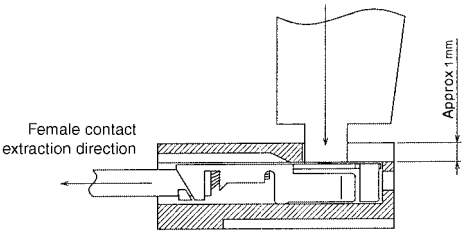
Type	Product No.	HRS No.	Applicable Contact
Applicator	AP105-HNC	CL901-4502-2	HNC-2.5S-C-A/HNC-2.5S-C-B
Press Main Unit	CM105	CL901-0005-4	————————
Manual Crimping Tool	TC-HNC-B	CL250-0005-7	HNC-2.5S-D-B
	TC-HNC-A	CL250-0006-0	HNC-2.5S-D-A
Extraction Tool	DF1-C-PO	CL550-0177-7	HNC-2.5S-C-A/HNC-2.5S-C-B

Note: If a trouble has occurred due to tools which are not designated by Hirose, Hirose won't guarantee any product.

■Application Pattern



◆Precautions for Use

1. Recommended Soldering Condition	■Flow Condition by Automatic Soldering Unit Soldering temperature: 250±5℃, Soldering time: Within 3 seconds ■Manual Soldering Condition Soldering iron temperature: 290±10℃, Soldering time: Within 2 seconds
2. Cleaning Condition	Refer to the "Nylon Connector Instruction Manual".
3. Connection Condition	Refer to the "Nylon Connector Instruction Manual". ●Extracting Crimping Contact To extract the crimping contact from the socket housing, observe the following extraction procedures. ■Extraction Tool Tool Name: DF-C-PO(CL550-0177-7) can be used. (1) Extraction Method As shown below in the figure, slightly pull the cable in the state where the DF1 extraction tool tip or the 0.5 to 0.7mm board has been inserted in the lance fixed slot, the contact can be easily removed. Note: If the lance is pressed excessively, the contact body may be deformed, which could result in contact failure. Therefore, be careful not to press the lance excessively.   (2) How to Adjust the Lance (Raise) To re-insert the terminal which is removed from the socket housing, use a sharp edge blade to raise the lance as shown below in the illustration, and then insert the contact. Note: Lance regeneration is effective only once.