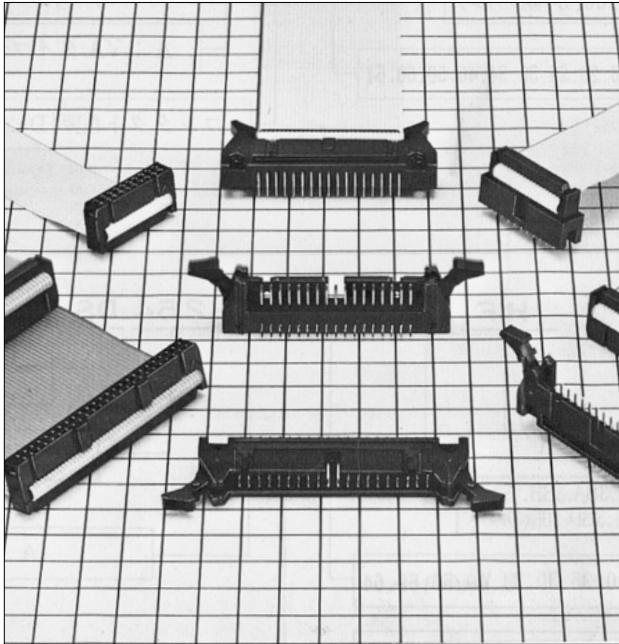


# Ribbon Cable connector Compliant with MIL Standard

## HIF3B Series



### ■ Features

#### 1. Product Compliant with MIL Standard

HIF3B series has been developed as a product compliant with MIL standard, and used for wide applications.

#### 2. UL Approval Product

HIF3B series connectors are UL approved.

#### 3. Mechanism to Prevent Mis-insertion

This connector is equipped with the mechanism to prevent Mis-insertion as follows.

- ① The system provides the convex area to insert the guide-key on the pin header side, and to guide it in combination with the socket convex area (MIL standard).
- ② The system embeds and guides the polarizing key in the socket holes.

#### 4. Applicable Cable AWG#28

The applicable cable is UL2651 AWG#28 flat cable (7 cores./0.127mm, jacket dia. 0.9±0.1mm).

### ■ Product Specifications

Rating	Current rating : 1A Voltage rating : 200V AC	Operating Temperature Range : -55 to +85°C (Note 1) Operating Moisture Range : 40 to 80%	Storage Temperature Range : -10 to +60°C (Note 2) Storage Humidity Range : 40 to 70% (Note 2)
--------	---	---	--

Item	Specification	Condition
1. Insulation Resistance	1000M ohms min.	500V DC
2. Withstanding voltage	No flashover or insulation breakdown.	650V AC/1 minute
3. Contact Resistance	15m ohms max.	0.1A
4. Vibration	No electrical discontinuity of 1μs or more	Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions.
5. Humidity (Steady state)	Insulation resistance: 1000M ohms min.	96 hours at temperature of 40°C and humidity of 90% to 95%
6. Temperature Cycle	No damage, cracks, or parts looseness.	(-65°C: 30 minutes → 15 to 35°C: 5 minutes max. 125°C: 30 minutes → 15 to 35°C: 5 minutes max.) 5 cycles
7. Durability (Mating/un-mating)	Contact resistance: 15m ohms max.	500 cycles
8. Resistance to Soldering heat	No deformation of components affecting performance.	Flow: 260°C for 10 seconds Manual soldering: 300°C for 3 seconds

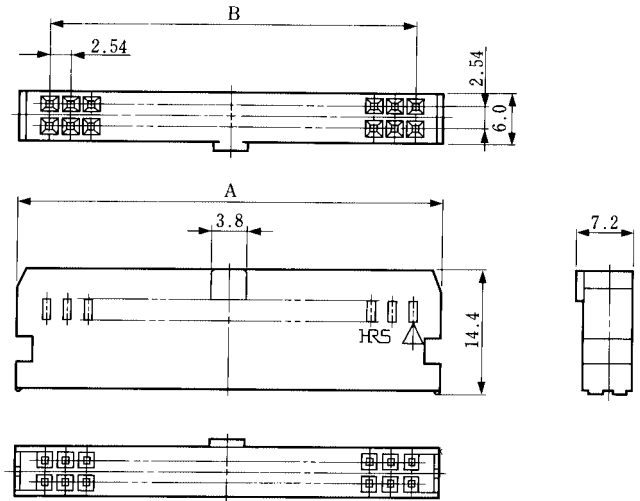
Note 1: Includes temperature rise caused by current flow.

Note 2: The term "storage" refers to products stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity range covers non conducting condition of installed connectors in storage, shipment or during transportation.

### ■ Material

Part	Material		Finish		Remarks
Insulator	PBT		Black		UL94V-0
Socket Contact	D	Beryllium copper	Connection area	Gold plated	_____
			Connection area	Gold plated	
	DA	Copper alloy	Connection area	Gold plated	
			Connection area	Tin lead plated	
Pin header contact	Brass		Selective Gold plated		_____

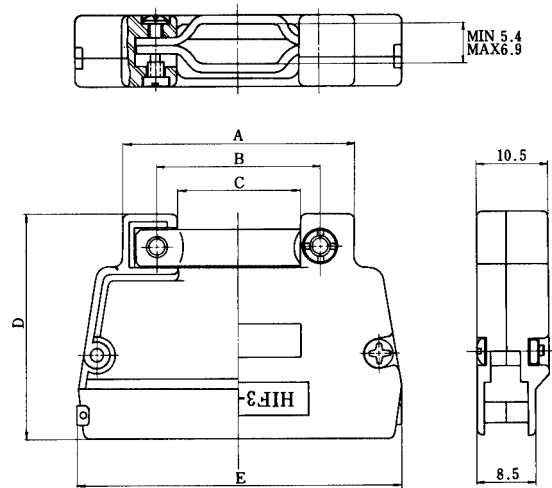
## ■Socket for Crimping



Unit: mm

Part Number	CL No.	Number of Contacts	A	B	Polarizing Guide
HIF3BA-10D-2.54C	610-1041-0	10	17.25	10.16	One at center
HIF3BA-14D-2.54C	610-1051-3	14	22.35	15.24	
HIF3BA-16D-2.54C	610-1042-2	16	24.8	17.78	
HIF3BA-20D-2.54C	610-1043-5	20	29.95	22.86	
HIF3BA-26D-2.54C	610-1044-8	26	37.55	30.48	
HIF3BA-30D-2.54C	610-1045-0	30	42.63	35.56	
HIF3BA-34D-2.54C	610-1046-3	34	47.75	40.64	
HIF3BA-40D-2.54C	610-1047-6	40	55.35	48.26	One right and left side, resp.
HIF3BA-50D-2.54C	610-1048-9	50	68.04	60.96	
HIF3BB-50D-2.54C	610-1061-7				
HIF3BA-60D-2.54C	610-1049-1	60	80.77	73.66	One right and left side, resp.
HIF3BB-60D-2.54C	610-1062-0				One at center
HIF3BA-64D-2.54C	610-1064-5	64	85.85	78.74	One right and left side, resp.
HIF3BB-64D-2.54C	610-1063-2				One at center

## ■Cover Case for Crimping socket

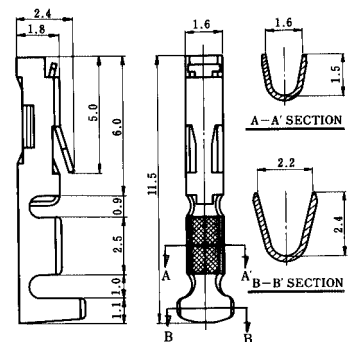
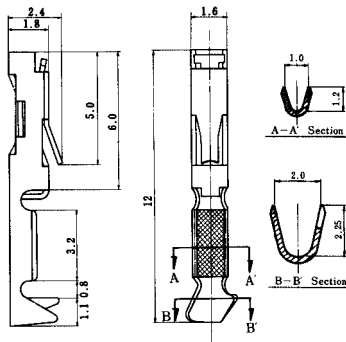
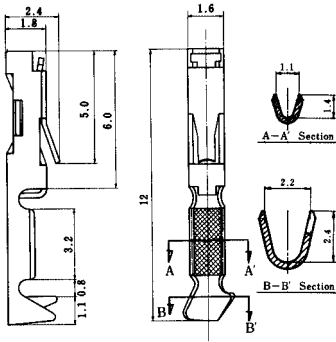


Unit: mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E
HIF3-20CV	562-0201-0	20	24.5	18.0	12.0	30.5	29.95
HIF3-26CV	562-0202-2	26	30.2	20.0	14.0	32.0	37.55
HIF3-30CV	562-0203-5	30	32.2	22.0	16.0	33.0	42.63
HIF3-34CV	562-0204-8	34	34.2	24.0	18.0	33.5	47.75
HIF3-40CV	562-0205-0	40	36.2	26.0	20.0	35.5	55.35
HIF3-50CV	562-0206-3	50	39.2	29.0	23.0	38.0	68.04
HIF3-60CV	562-0207-6	60	42.2	32.0	26.0	40.5	80.77

Note: The type F lock pin header cannot be used for a mating member.

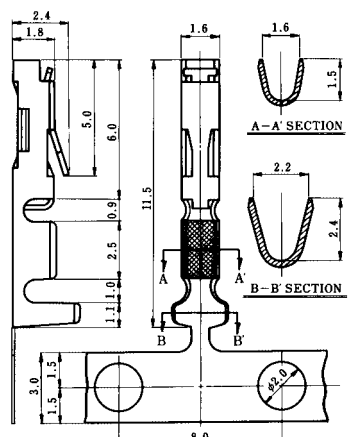
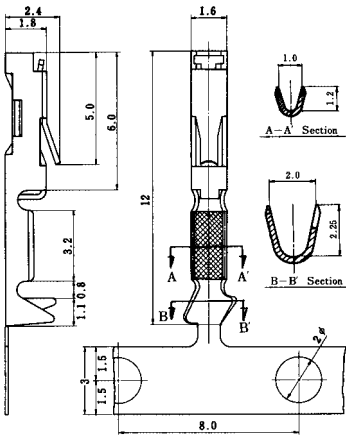
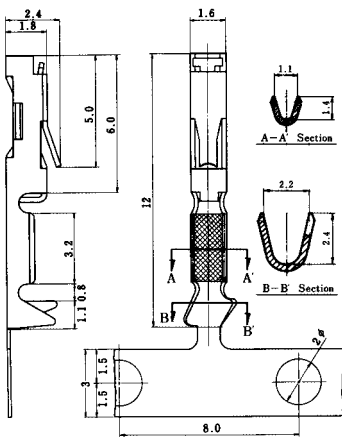
# ■Contact for Crimping Socket



HIF3-2226SC	562-0079-8	gold plated contact in bag
HIF3-2226SCA	562-0244-2	Selective gold plated contact in bag
Applicable cable	AWG#22 to #26 UL 1007 Stranded wire	
Manual crimping tool	HIF3-T2226HC	

HIF3-2428SC	562-0124-0	gold plated contact in bag
HIF3-2428SCA	562-0246-8	Selective gold plated contact in bag
Applicable cable	AWG#24 to #28 UL 1007 Stranded wire	
Manual crimping tool	HIF3-TA2428HC	

HIF3-2022SC	562-0492-4	gold plated contact in bag
Applicable cable	AWG#20 to #22 UL 1007 Stranded wire	
Manual crimping tool	HIF3-TA2022HC	



HIF3-2226SCF	562-0080-7	gold plated contact in reel
* HIF3-2226SCFA	562-0245-5	Selective gold plated contact in reel
Applicable cable	AWG#22 to #26 UL 1007 Stranded wire	

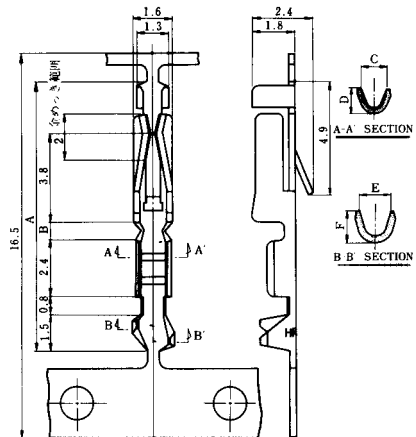
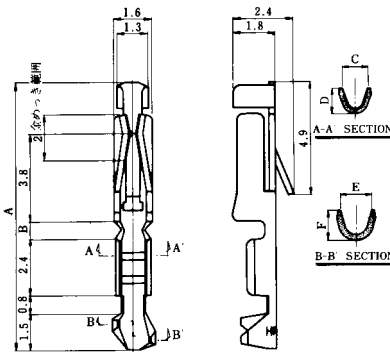
HIF3-2428SCF	562-0125-3	gold plated contact in reel
* HIF3-2428SCFA	562-0247-0	Selective gold plated contact in reel
Applicable cable	AWG#24 to #28 UL 1007 Stranded wire	

HIF3-2022SCF	562-0493-7	gold plated contact in reel
Applicable cable	AWG#20 to #22 UL 1007 Stranded wire	

Note: \* products have both side careers.

## Type VA (Selective gold plated in reel)

Part Number	CL No.	Applicable Cable	A	B	C	D	E	F
HIF3-2226SCFC	613-0002-1	AWG#22 to #26 UL 1007 Stranded wire	11.5	0.8	1.8	1.8	2.3	2.6
HIF3-2630SCFC	613-0001-9	AWG#26 to #30 UL 1007 Stranded wire	11.5	0.8	1.4	1.35	2.0	2.1
HIF3A-3236SCFC	613-0005-0	AWG#32 to #36 UL 1007 Stranded wire	12.4	1.7	1.1	1.1	1.4	1.5

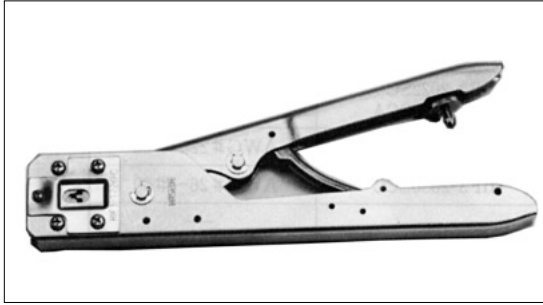


## Type VA (Selective gold plated contact in bag)

Part Number	CL No.	Applicable Cable	Manual Crimp Tool	A	B	C	D	E	F
HIF3-2226SCC	613-0004-7	AWG#22 to #26 UL 1007 Stranded wire	HIF3-TB2226HC	11.5	0.8	1.8	1.8	2.3	2.6
HIF3-2630SCC	613-0003-4	AWG#26 to #30 UL 1007 Stranded wire	HIF3-TB2630HC	11.5	0.8	1.4	1.35	2.0	2.1

## ◆Tools

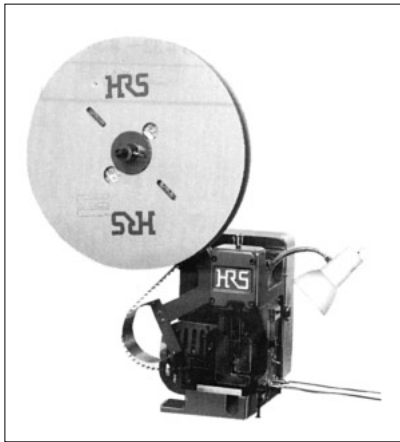
### ●Crimping Tool



Part Number	CL No.
HIF3-T2226HC	550-0063-8

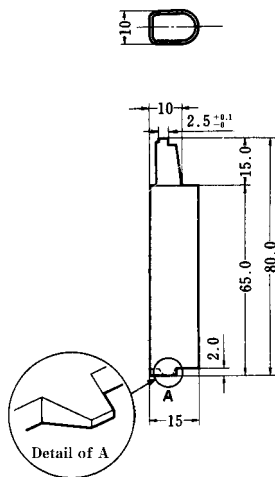
Manual Crimping Tool HIF3-T2226HC

### ●Automatic Crimping Tool (Type: CM-105)



Part Number	CL No.
CM-105	901-0005-4

### ●Contact Extraction Tools



Part Number	CL No.
HIF1-PO	550-0049-7

### How to use the extraction tool

#### (1) How to extract contacts

As shown in Figure 1, where the extraction tool is inserted in the lance fixed slot on the insulated case, slightly pull the cable, and the contact can be removed.

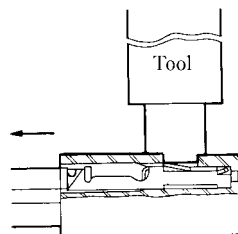


Figure 1

#### (2) How to adjust the lance (raise)

In order to re-insert the contact removed from the insulated case, raise the contact lance area using the tool A, and re-insert the contact, as shown in Figure 2.

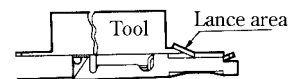


Figure 2

Type	Item	Part Number	CL No.	Applicable Contact	Applicable Cable
Manual	Manual crimping tool	HIF3-T2226HC	550-0063-8	HIF3-2226SC HIF3-2226SCA	AWG#22 to #26
		HIF3-TA2428HC	550-0100-2	HIF3-2428SC HIF3-2428SCA	AWG#24 to #28
		HIF3-TA2022HC	550-0124-0	HIF3-2022SC	AWG#20 to #22
		HIF3-TB2226HC	550-0154-1	HIF3-2226SCC	AWG#22 to #26
		HIF3-TB2630HC	550-0155-4	HIF3-2630SCC	AWG#26 to #30
Automatic	Automatic crimping tool unit	CM-105	901-0005-4	—————	—————
	Applicator	AP105-HIF3-22-28SCF <small>(Note1)</small>	901-4031-6	HIF3-2226SCF	AWG#22 to #26
				HIF3-2428SCF	AWG#24 to #28
		AP105-HIF3-22-28SCFA <small>(Note1)</small>	901-4030-3	HIF3-2226SCFA	AWG#22 to #26
				HIF3-2428SCFA	AWG#24 to #28
		AP105-HIF3-2022S	901-4027-9	HIF3-2022SCF	AWG#20 to #22
		AP105-HIF3-2226SCFC	901-4005-6	HIF3-2226SCFC	AWG#22 to #26
		AP105-HIF3-2630SCFC	901-4006-9	HIF3-2630SCFC	AWG#26 to #30
AP105-HIF3-3236SCFC	901-4007-1	HIF3-3236SCFC	AWG#32 to #36		
Extraction tool		HIF1-PO	550-0049-7	—————	—————

Note1: AP106-HIF3-22-28SCF and AP105-HIF3-22-28CFA can be modified by changing a few parts.

## ◆Socket Side (Crimping) Assembling Procedures

- (1) As shown in Figure 1, peel the applicable cable (AWG#20 to #26) jacket, and connect it using crimping jig HIF3-TA2022HC, HIF3-TA2226HC, or HIF3-TA2426HC. In this case, insert the cable so as to hit the contact cable stripper position as shown Figure 2.
- (2) After connection as shown Figure 2, check the contact direction, and insert the contact as shown Figures 3 and 4. Slightly pull the cable, and check whether the contact lance position is firmly fixed to the insulation case, as shown in the area (A).

Note : For handling procedures for special crimping tools, refer to the "Handling Instruction Manual".

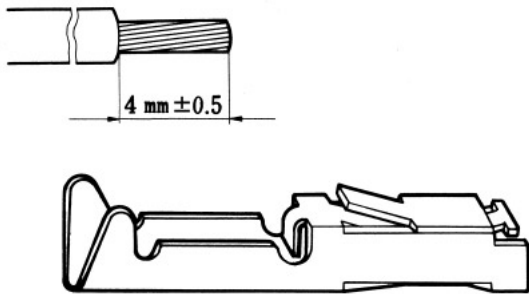


Figure 1

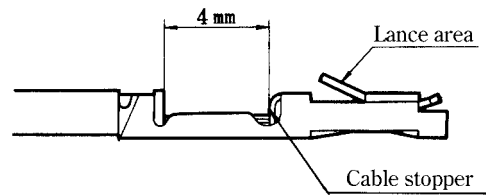


Figure 2

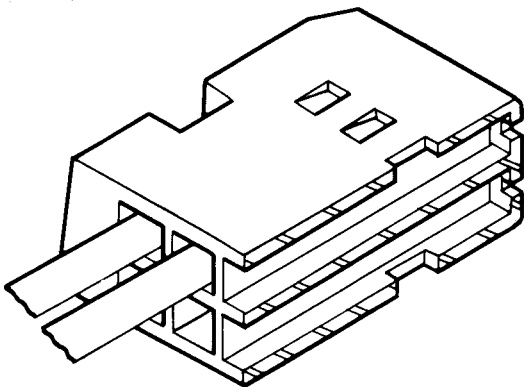


Figure 3

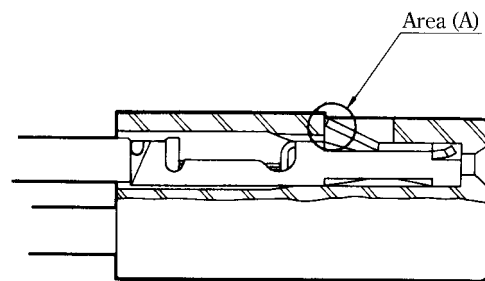


Figure 4