Ribbon Cable Connector

HIF4 Series

■Features

1. Current Capacity

The HIF4 series connector is capable of 3 A current capacity used for wider applications, while the HIF3 series uses 1 A capacity.

2. Full Lock Mechanism

This connector is equipped with a Hirose original locking mechanism, and guarantees excellent reliability for vibration and shock.

3. One-touch Insertion and Extraction Mechanism

This connector is equipped with levers for automatic insertion and extraction, as soon as lock is reset. Insertion and extraction tools are not required.

4. Applicable Cable

The applicable cable is UL2651 AWG#24 flat cable (7 cores./0.203mm, jacket dia :1.0 to 1.2mm).

■Applications

Computers, terminal equipment, various kinds of electronic equipment, and office automation machines

■Product Specifications

Rating	Current rating : 3A	Operating Temperature Range : –55 to +85℃ (Note 1)	Storage Temperature Range : –10 to +60℃ (Note 2)
	Voltage rating : 300V AC	Operating Moisture Range : 40 to 80%	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.	1000V 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℃ and humidity of 90% to 95%
6. Temperature Cycle	No damage, cracks, or parts looseness.	(-65℃: 30 minutes → 15 to 35℃: 5 minutes max. 125℃: 30 minutes → 15 to 35℃: 5 minutes max.) 5 cycles
7. Operating Life	Contact resistance: 15m ohms max.	500 cycles
8. Resistance to Soldering heat	No deformation of components affecting performance.	Flow: 260℃ for 10 seconds
		Manual soldering: 300℃ 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
Contact	Socket	Beryllium copper	gold plating	———
	Pin header	Phosphor bronze	gold plating	

■Ordering Information

●Pin Header

HIF4 - ✻ P - 3.18 DS
❶ ❷ ❸ ❹ ❺

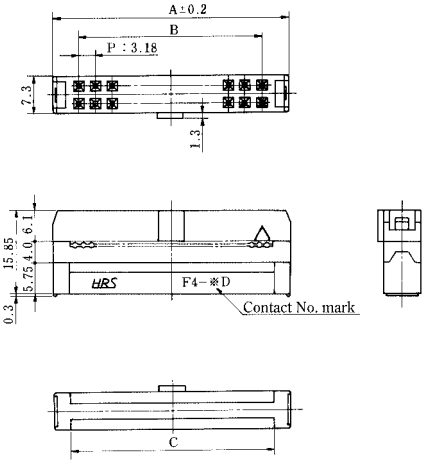
❶ Series Name	: HIF4
❷ Number of Contacts	: 16, 20, 26, 34, 40
❸ P : Pin header	
❹ Contact Pitch	: 3.18mm
❺ Contact Type	
	DS : Right angle type
	SA : Straight dip type
	W : Wrapping type

●Socket

HIF4 - ✻ D - 3.18 R
❶ ❷ ❸ ❹ ❺

❶ Series Name	: HIF4
❷ Number of Contacts	: 16, 20, 26, 34, 40
❸ Contact alignment	: D : Double
❹ Contact Pitch	: 3.18mm
❺ Connection type	: Ribbon cable

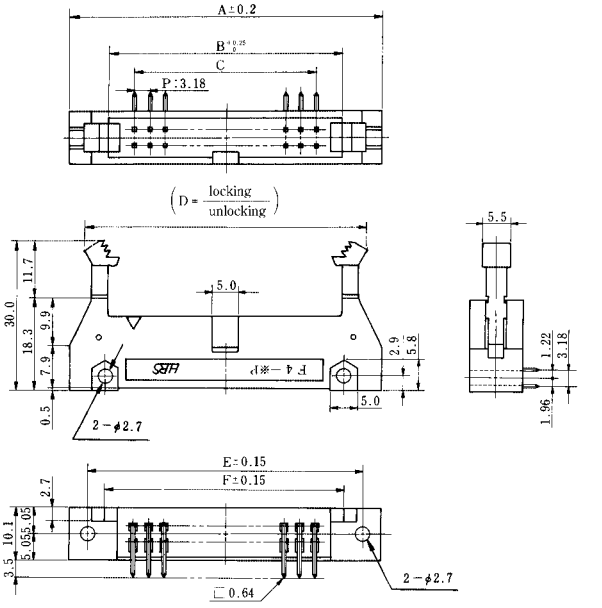
■Socket



Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C
HIF4-16D-3.18R	563-0025-5	16	31.98	22.26	26.28
HIF4-20D-3.18R	563-0010-8	20	38.34	28.62	32.64
HIF4-26D-3.18R	563-0011-0	26	47.88	38.16	42.18
HIF4-34D-3.18R	563-0012-3	34	60.6	50.88	54.9
HIF4-40D-3.18R	563-0029-6	40	70.14	60.42	64.44

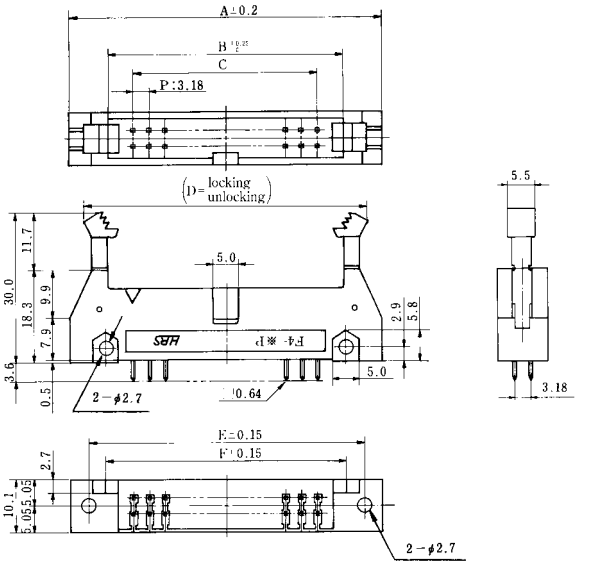
■Pin Header Right Angle Type



Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E	F
HIF4-16P-3.18DS	563-0026-8	16	46.68	32.18	22.26	42.82 / 63.28	39.98	33.58
HIF4-20P-3.18DS	563-0001-7	20	53.04	38.54	28.62	49.18 / 69.64	46.34	39.94
HIF4-26P-3.18DS	563-0002-0	26	62.58	48.08	38.16	58.72 / 79.18	55.88	49.48
HIF4-34P-3.18DS	563-0003-2	34	75.3	60.8	50.88	71.44 / 91.90	68.6	62.2
HIF4-40P-3.18DS	563-0030-5	40	84.84	70.34	60.42	80.89 / 101.44	78.14	71.74

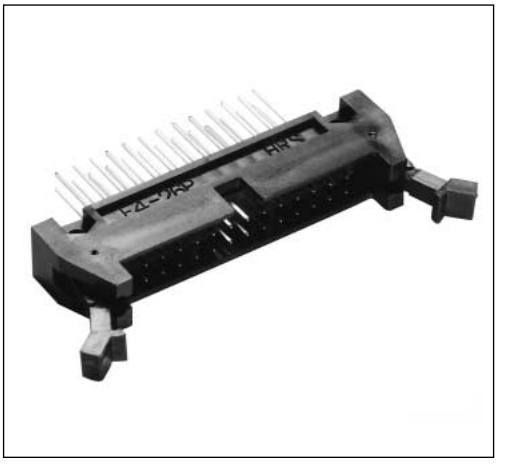
■Pin Header Straight Dip Type

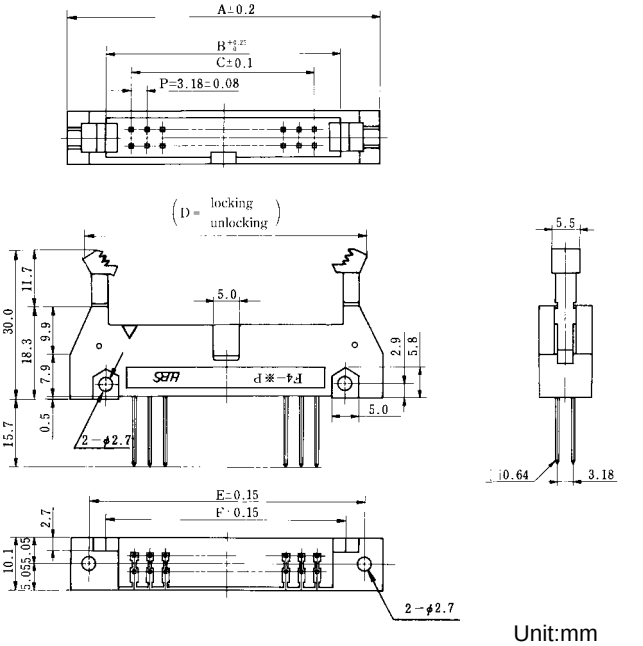


Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E	F
HIF4-16P-3.18DSA	563-0027-0	16	46.68	32.18	22.26	42.82 63.28	39.98	33.58
HIF4-20P-3.18DSA	563-0004-5	20	53.04	38.54	28.62	49.18 69.64	46.34	39.94
HIF4-26P-3.18DSA	563-0005-8	26	62.58	48.08	38.16	58.72 79.18	55.88	49.48
HIF4-34P-3.18DSA	563-0006-0	34	75.3	60.8	50.88	71.44 91.90	68.6	62.2
HIF4-40P-3.18DSA	563-0031-8	40	84.84	70.34	60.42	80.98 101.44	78.14	71.74

■Pin Header Wrapping Type



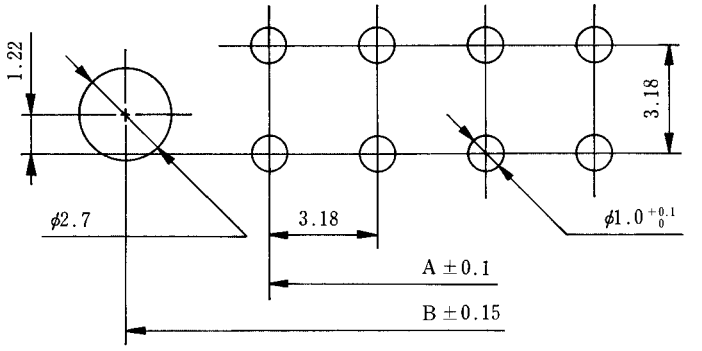


Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E	F
HIF4-16P-3.18W	563-0028-3	16	46.68	32.18	22.26	42.82 63.28	39.98	33.58
HIF4-20P-3.18W	563-0007-3	20	53.04	38.54	28.62	49.18 69.64	46.34	39.94
HIF4-26P-3.18W	563-0008-6	26	62.58	48.04	38.16	58.72 79.18	55.88	49.48
HIF4-34P-3.18W	563-0009-9	34	75.3	60.8	50.88	71.44 91.90	68.6	62.2
HIF4-40P-3.18W	563-0032-0	40	84.84	70.34	60.42	80.98 101.44	78.14	71.74

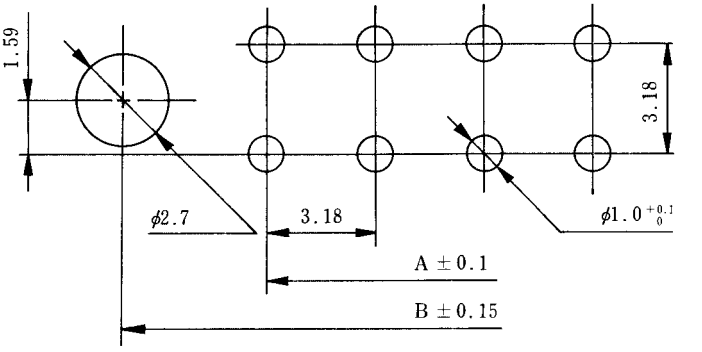
◆PCB mounting pattern

●Pin Header Right Angle Type



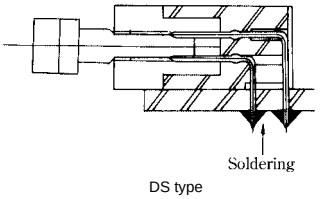
Number of Contacts	A	B
16	22.26	33.58
20	28.62	39.94
26	38.16	49.48
34	50.88	62.20
40	60.42	71.74

●Pin Header Straight Dip Type or Pin Header Wrapping Type

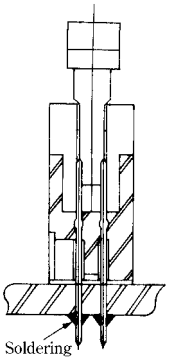


Number of Contacts	A	B
16	22.26	39.98
20	28.62	46.34
26	38.16	55.88
34	50.88	68.60
40	60.42	78.14

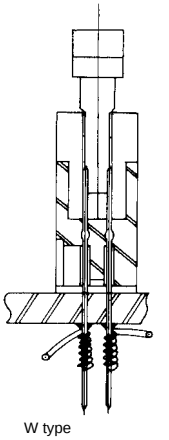
●Type Shape



DS type



DSA type



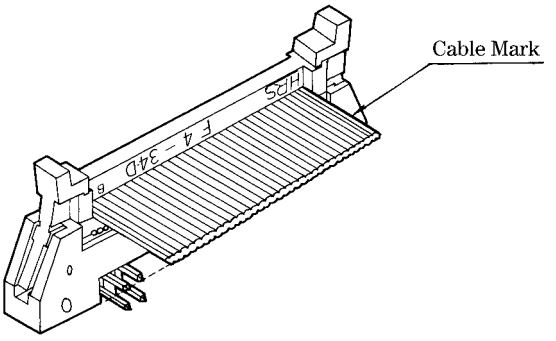
W type

◆HIF4 Basic Connection Method

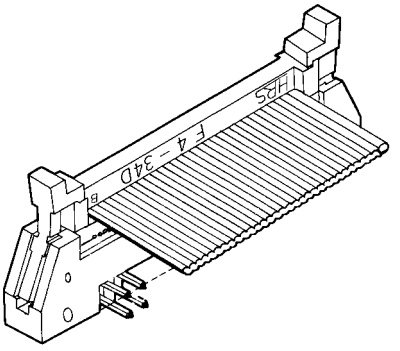
As shown below in Figure 1, contact positions are indicated by marks (○●◆◆).

Fig.1

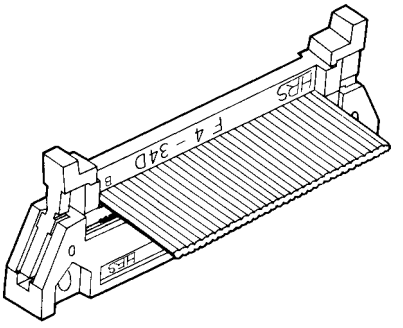
The connected contact is indicated with a symbol next to the individual type name. However, the contact symbol connected to the cable mark is indicated at the mark ∗.



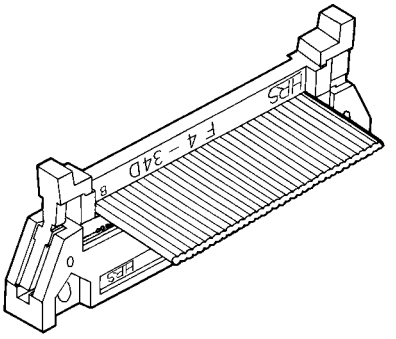
Type AO



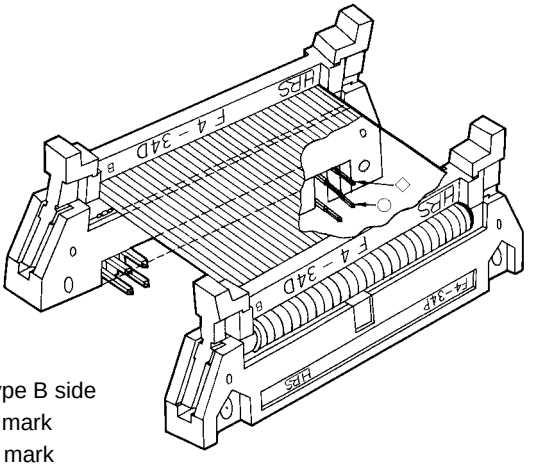
Type BO



Type CO

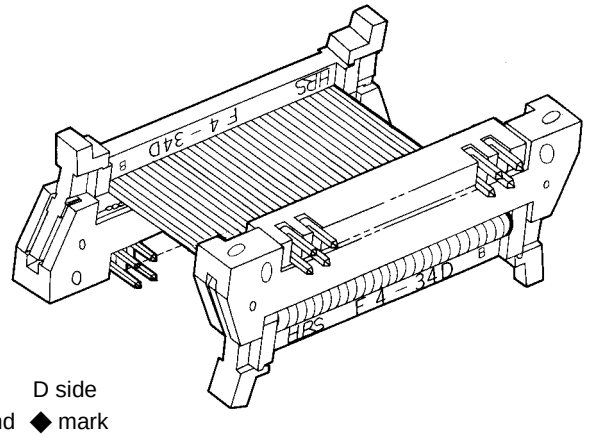


Type DO



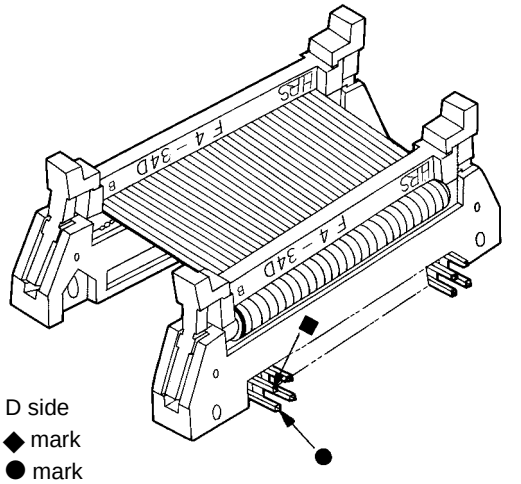
Type AB

	Type A side		Type B side
∗	○ mark	and	◆ mark
	◇ mark	and	● mark



Type AD

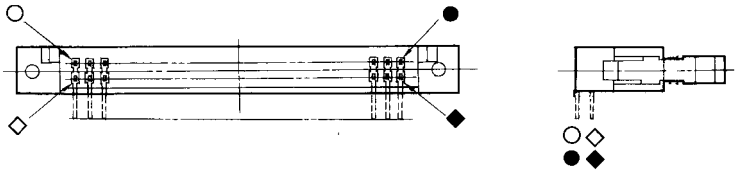
	A side		D side
∗	○ mark	and	◆ mark
	◇ mark	and	● mark



Type CD

	C side		D side
∗	○ mark	and	◆ mark
	◇ mark	and	● mark

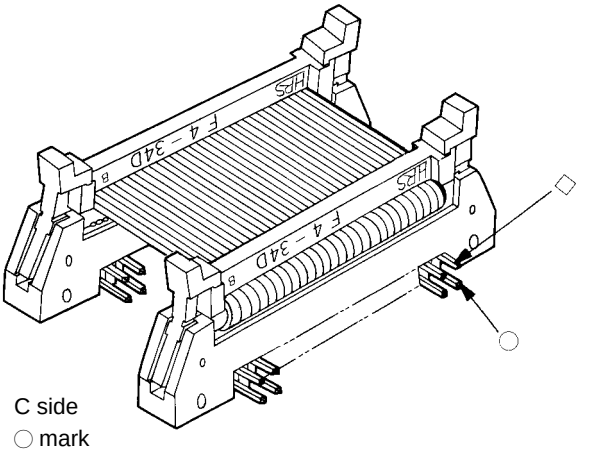
Contact positions are designated with marks as shown below.



According to the illustration on the left, the illustration 1 indicates these positions on the right.

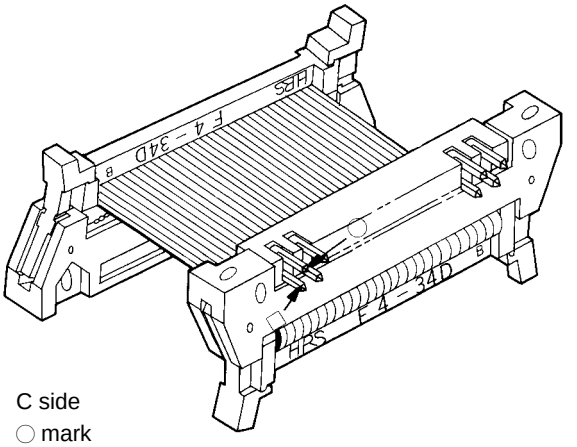
Note 1: Cable length tolerance
500 +10, 0 max. (mm)
500 +3%, 0% min.

Note 2.When a twist cable or a slit (like a roller screen) cable is used, the cable pitch will change according to cable manufacturers. If connection failure has occurred, consult HRS Sales Department.



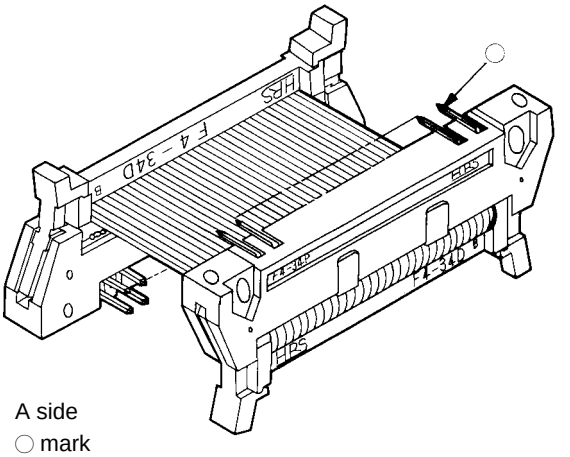
Type AC

	A side		C side
✻	○ mark	and	○ mark
	◇ mark	and	◇ mark



Type CC

	C side		C side
✻	○ mark	and	○ mark
	◇ mark	and	◇ mark



Type AA

	A side		A side
✻	○ mark	and	○ mark
	◇ mark	and	◇ mark