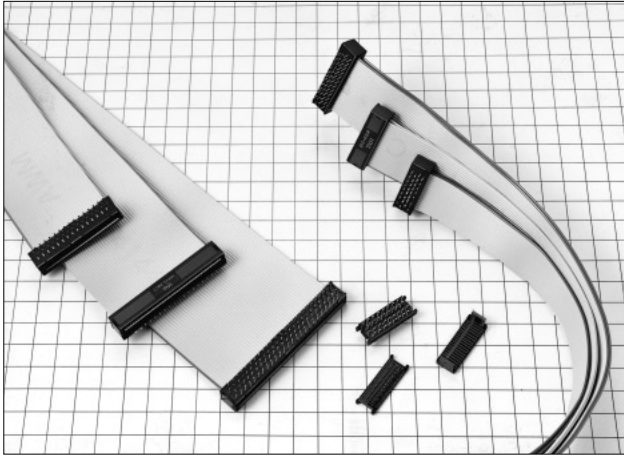


# 1.27mm Pitch Connector Directly Mounted on Board

## HIF12 Series



### ■ Features

#### 1. Directly Mounted on Board

This connector, which is directly mounted on the board, can insulate and displace the 1.27mm pitch flat cable at a time.

#### 2. Broad Connection

Using the 1.27mm pitch flat cable, this connector can be combined with HIF2E, HIF3B, HIF5, and HIF6.

#### 3. Applicable Cable

The applicable cable is UL2651 AWG#28 flat cable (7 cores/.0.127mm, jacket dia. :0.8 to 1.0mm).

### ■ Applications

Computers, terminal equipment, various kinds of business machines.

### ■ Product Specifications

Rating	Current rating: 0.5A	Operating Temperature Range: -55 to +85°C(Note 1)	Storage Temperature Range:-10 to +60°C (Note 2)
	Voltage rating: 125V AC	Operating Moisture Range: 40 to 80%	Storage Humidity Range: 40 to 70% (Note 2)

Item	Specification	Condition
1. Insulation Resistance	1000M ohms min.	250V DC
2. Withstanding voltage	No flashover or insulation breakdown.	300V AC/1 minute
3. Contact Resistance	30m ohms max.	0.1A
4. Vibration	No electrical discontinuity of 1 $\mu$ s 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. 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

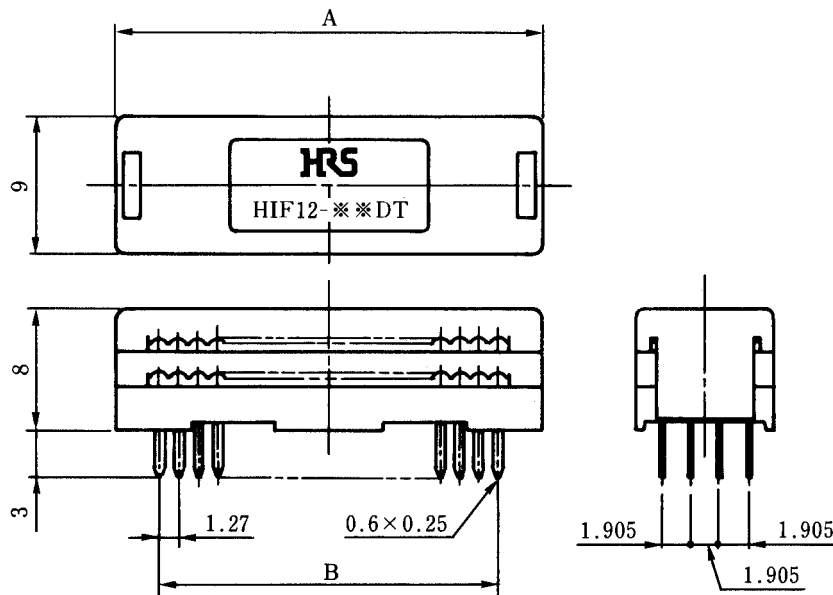
Part	Material	Finish	Remarks
Insulator	PBT	Black	UL94V-0
Contact	Beryllium copper	Tin-lead plated	———

## ■ Ordering Information

**HIF12** - **\*** **DT** - **1.27** **R**  
 ①                    ②                    ③                    ④                    ⑤

① Series Name	: HIF 12
② Number of contacts	: 34, 40, 50, 52, 60, 68, 80, 100
③ Contact alignment	: 4-row staggered
④ Contact Pitch	: 1.27mm
⑤ R	: Ribbon cable

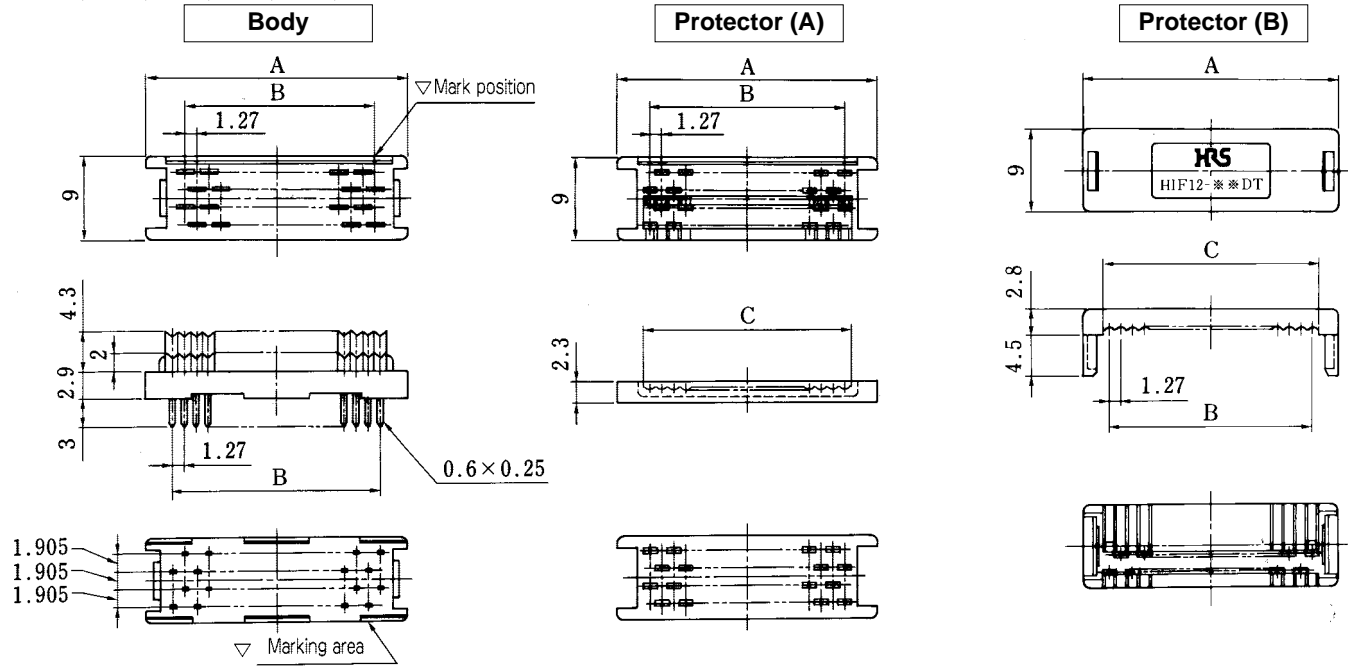
## ◆ Combination Pattern



Unit: mm

Number of Contacts	34	40	50	52	60	68	80	100
A	26.06	29.87	36.22	37.49	42.57	47.65	55.27	67.97
B	20.32	24.13	30.48	31.75	36.83	41.91	49.53	62.23

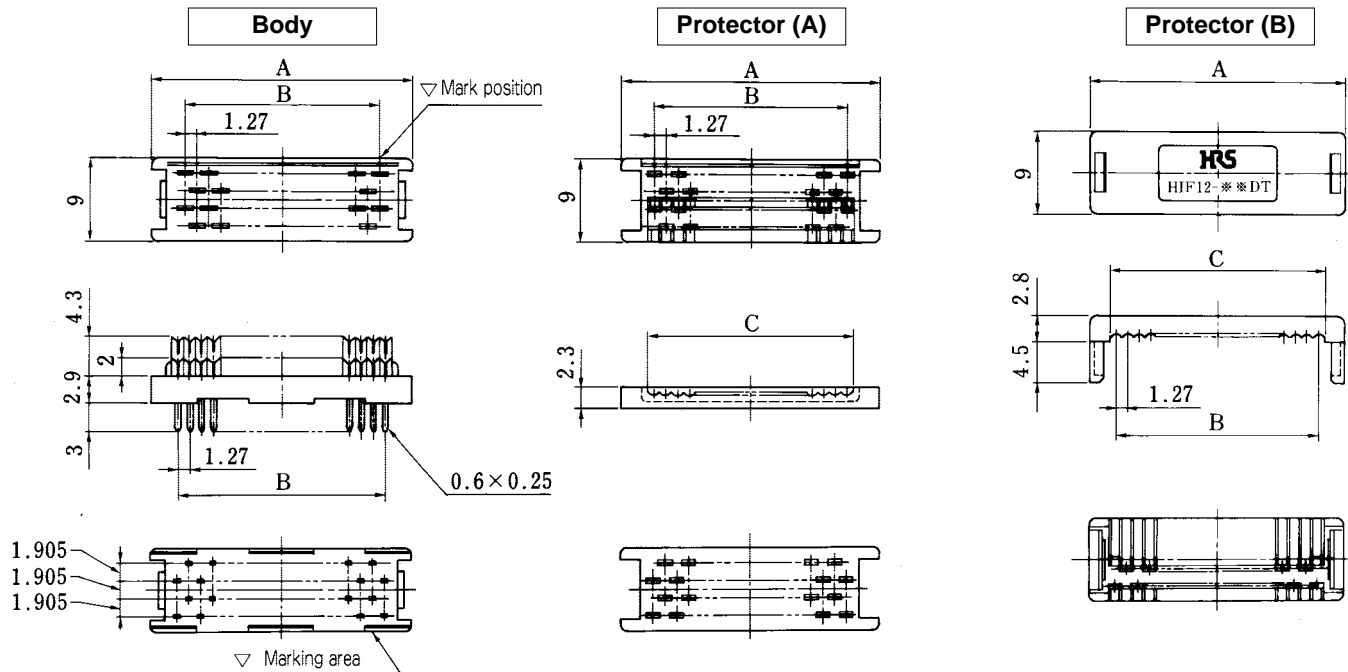
## ■40, 52, 60, 68, 80, 100 contacts



Unit: mm

Part Number	CL No.	Number of Contacts	A	B	C
HIF12- 40DT-1.27R	660-0005-7	40	29.87	24.13	25.55
HIF12- 52DT-1.27R	660-0007-2	52	37.49	31.75	33.17
HIF12- 60DT-1.27R	660-0008-5	60	42.57	36.83	38.25
HIF12- 68DT-1.27R	660-0009-8	68	47.65	41.91	43.33
HIF12- 80DT-1.27R	660-0010-7	80	55.27	49.53	50.95
HIF12-100DT-1.27R	660-0011-0	100	67.97	62.23	63.65

## ■34, 50 contacts



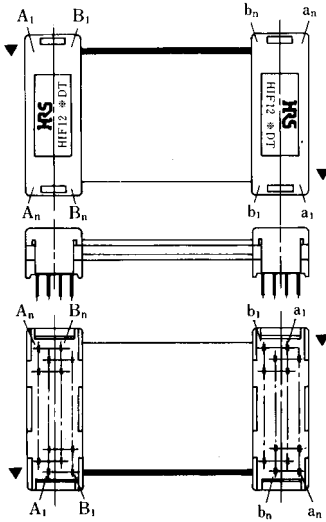
Unit: mm

Part Number	CL No.	Number of Contacts	A	B	C
HIF12-34DT-1.27R	660-0004-4	34	26.06	20.32	21.74
HIF12-50DT-1.27R	660-0006-0	50	36.22	30.48	31.9

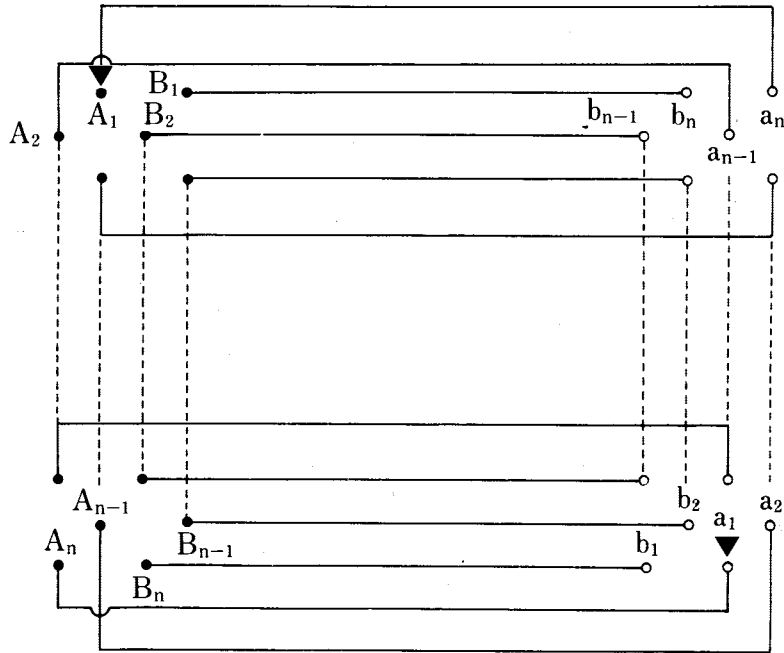
# ◆ HIF12-HIF12 Connection Circuit Diagram 40, 52, 60, 68, 80, 100 contacts

$$n = \frac{\text{number of contacts}}{2}$$

## ● Type A, B

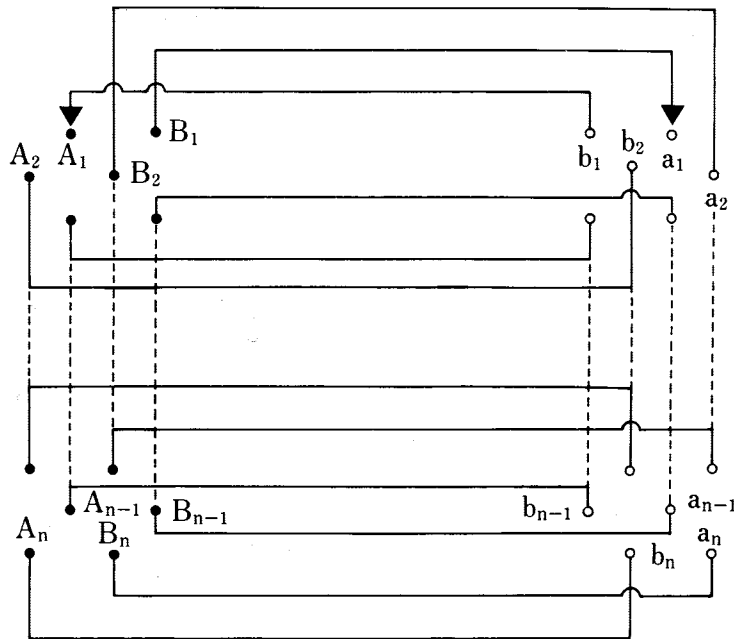
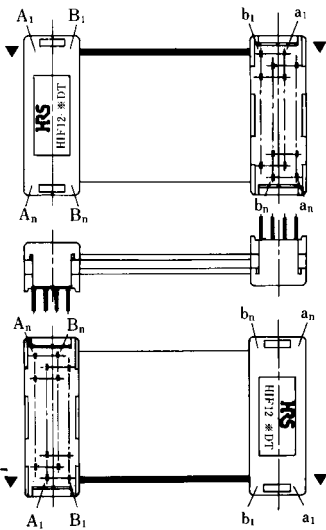


Note: In the connection circuit diagram as shown, don't connect to pin No. 2. For connection to pin No. 2, contact Hirose PCC Engineering Department.



Cable 1 Connection	Cable 2 Connection
A1 ————— an	B1 ————— bn
A2 ————— an-1	B2 ————— bn-1
⋮	⋮
An ————— a1	Bn ————— b1

## ● Type A, A

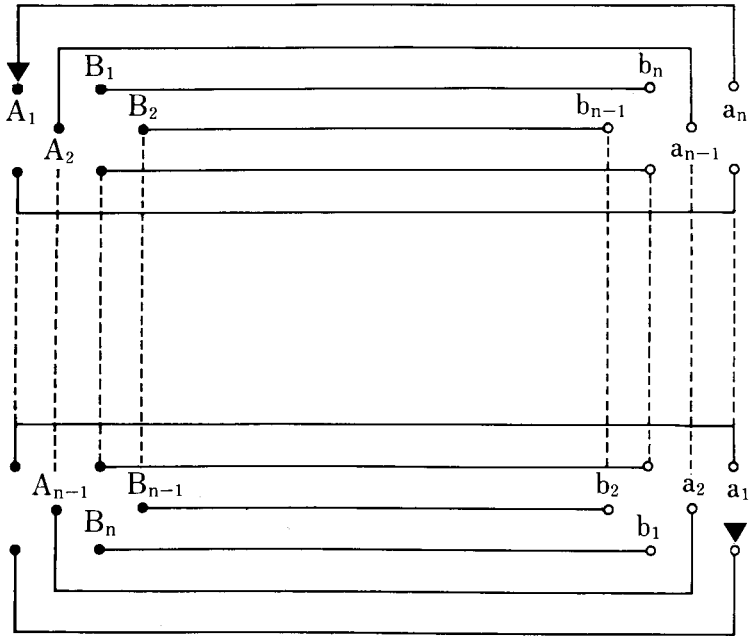
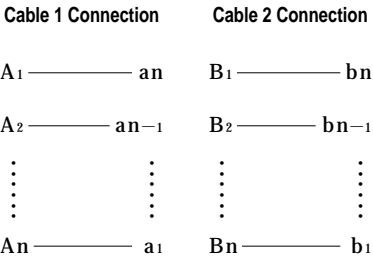
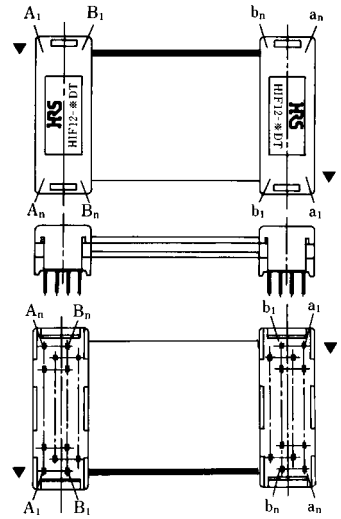


Cable 1 Connection	Cable 2 Connection
A1 ————— b1	B1 ————— a1
A2 ————— b2	B2 ————— a2
⋮	⋮
An ————— bn	Bn ————— an

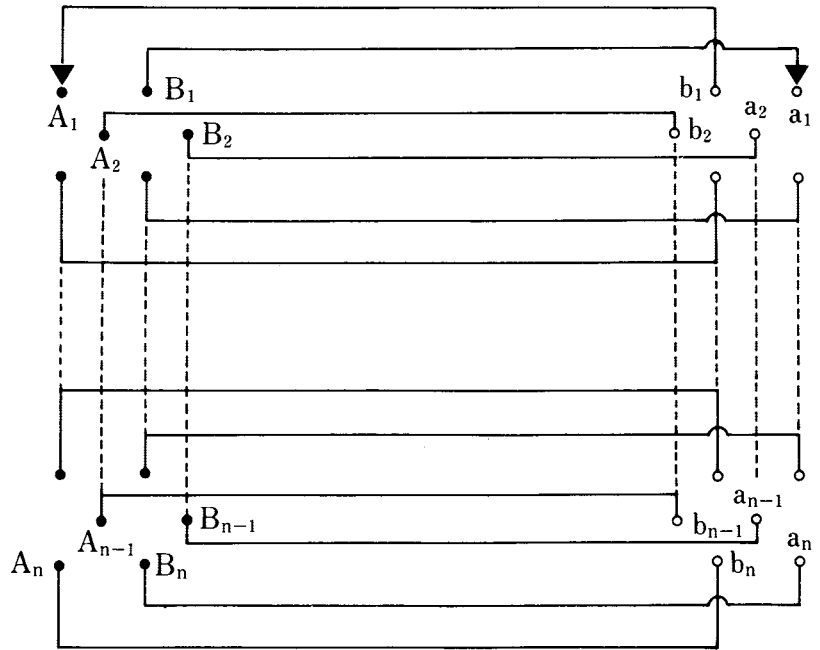
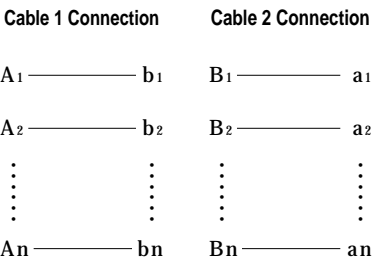
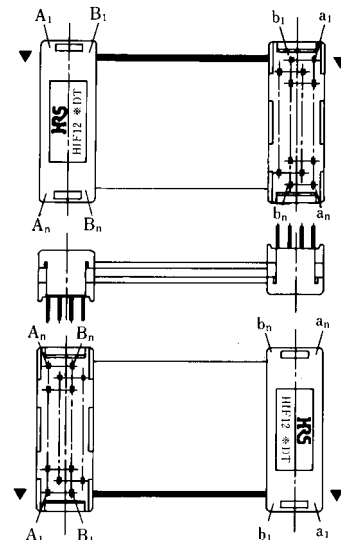
# ◆ HIF12-HIF6 Connection Circuit Diagram 34, 50 contacts

## ● Type A, B

$$n = \frac{\text{number of contacts}}{2}$$

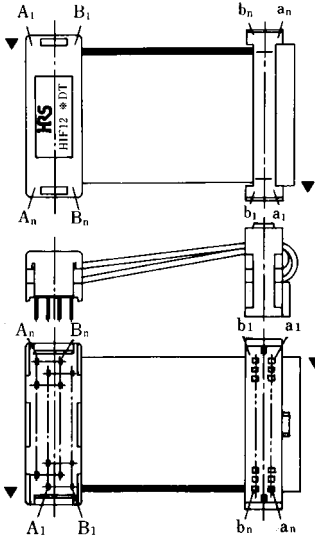


## ● Type A, A



# ◆ HIF12-HIF6 Connection Circuit Diagram 40, 52, 60, 68, 80, 100 contacts

## ● Type A, B

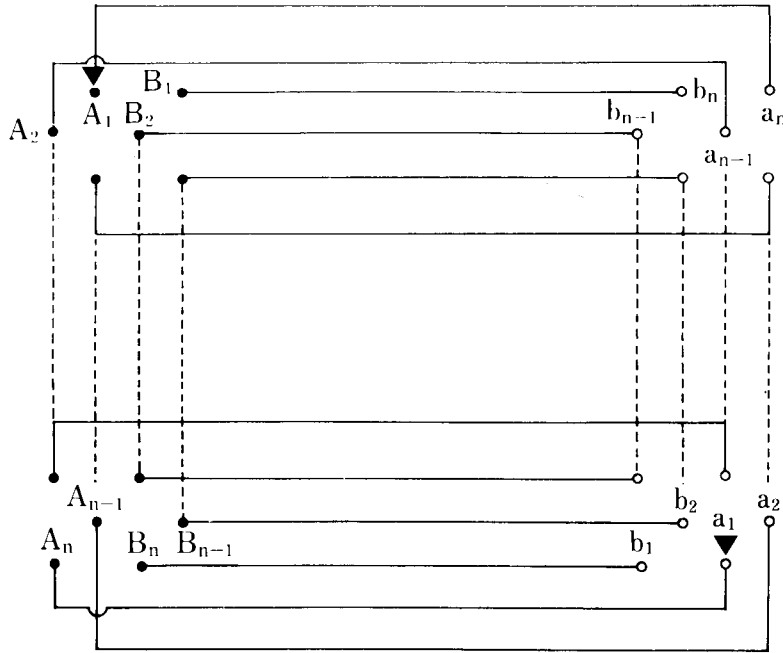


Note: In the connection circuit diagram as shown, don't connect to pin No. 2. For connection to pin No. 2, contact Hirose PCC Engineering Department.

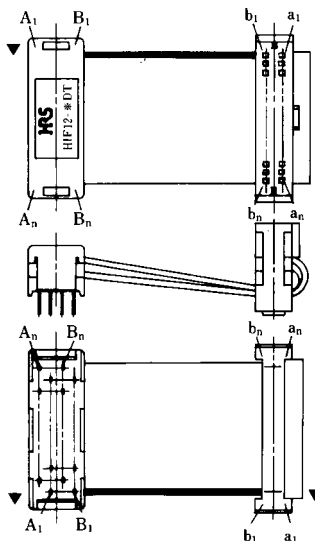
$$n = \frac{\text{number of contacts}}{2}$$

Cable 1 Connection      Cable 2 Connection

A1	—	an	B1	—	bn
A2	—	an-1	B2	—	bn-1
⋮		⋮	⋮		⋮
An	—	a1	Bn	—	b1

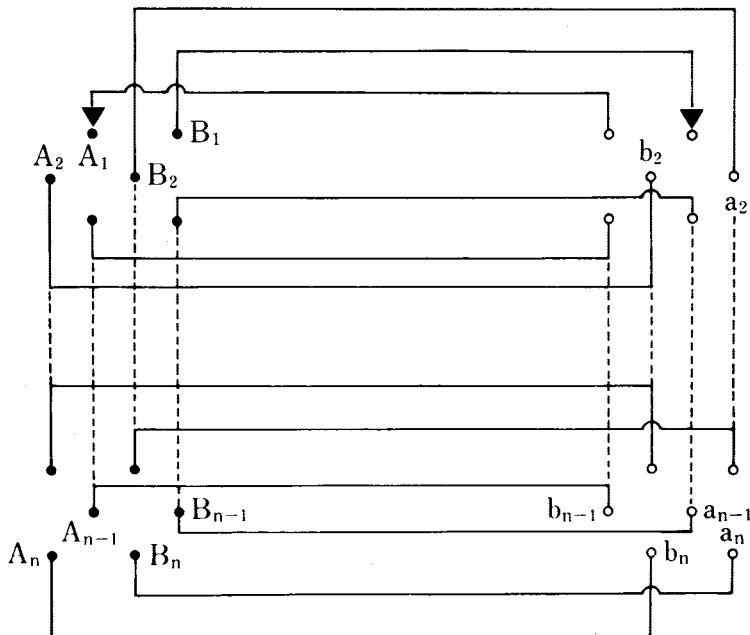


## ● Type A, A



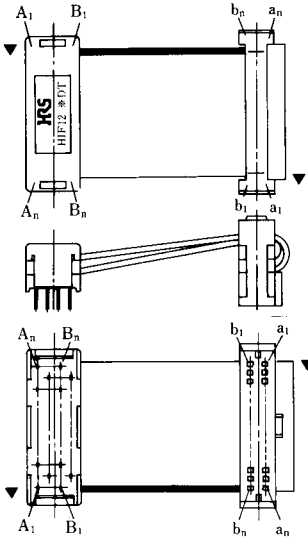
Cable 1 Connection      Cable 2 Connection

A1	—	b1	B1	—	a1
A2	—	b2	B2	—	a2
⋮		⋮	⋮		⋮
An	—	bn	Bn	—	an

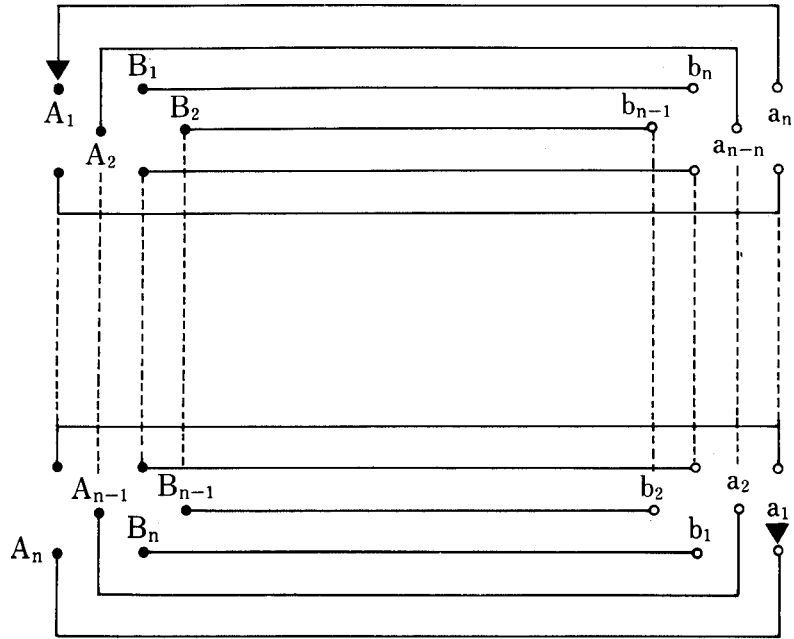


◆ HIF12-HIF12 Connection Circuit Diagram 34, 50 contacts

● Type A, B



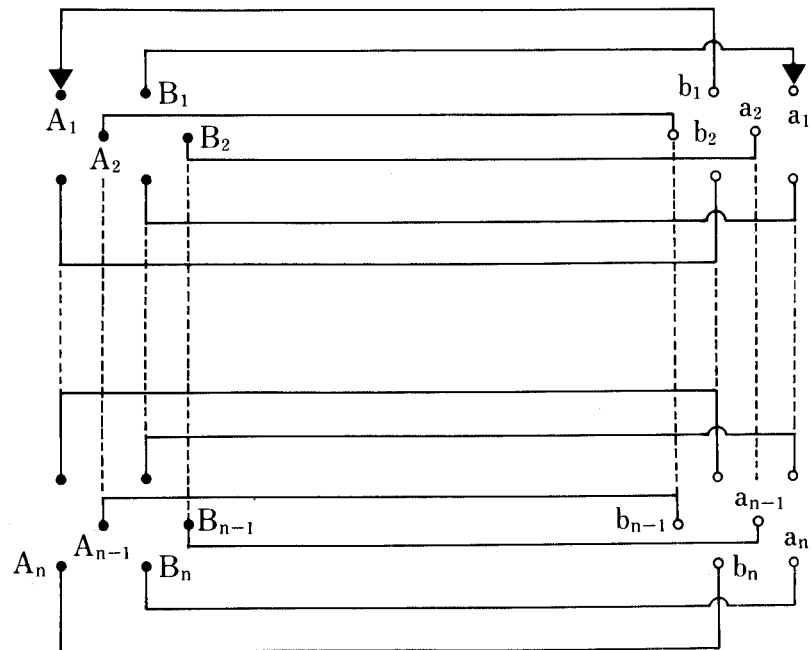
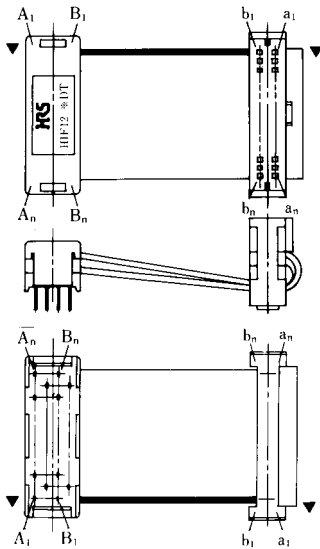
$$n = \frac{\text{number of contacts}}{2}$$



Cable 1 Connection      Cable 2 Connection

A <sub>1</sub> ——— An	B <sub>1</sub> ——— b <sub>n</sub>
A <sub>2</sub> ——— a <sub>n-1</sub>	B <sub>2</sub> ——— b <sub>n-1</sub>
⋮	⋮
A <sub>n</sub> ——— a <sub>1</sub>	B <sub>n</sub> ——— b <sub>1</sub>

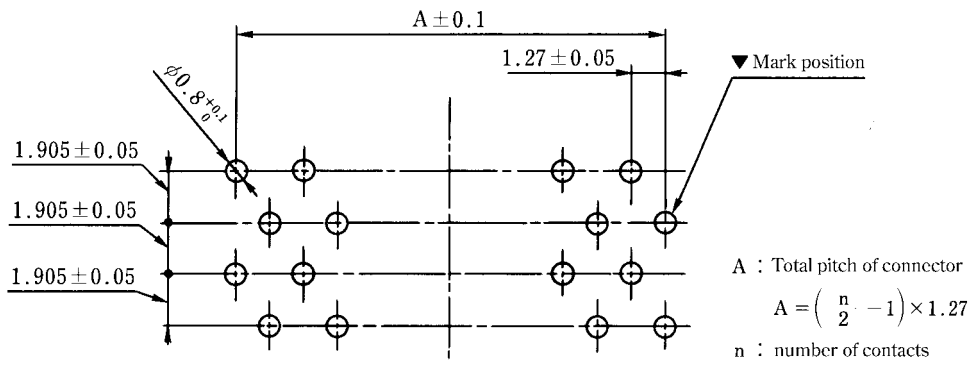
● Type A, A



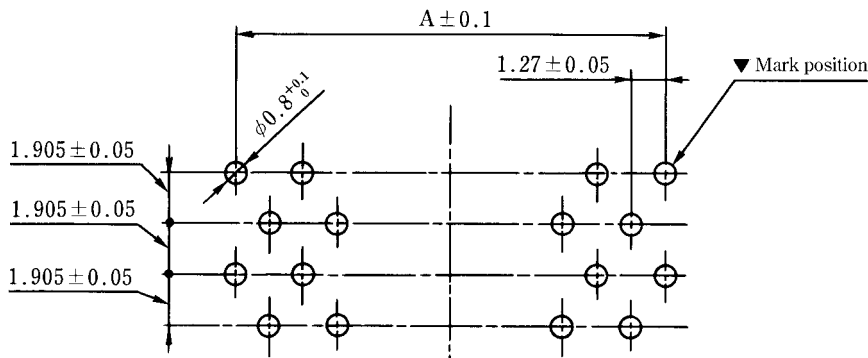
Cable 1 Connection      Cable 2 Connection

A <sub>1</sub> ——— b <sub>1</sub>	B <sub>1</sub> ——— a <sub>1</sub>
A <sub>2</sub> ——— b <sub>2</sub>	B <sub>2</sub> ——— a <sub>2</sub>
⋮	⋮
A <sub>n</sub> ——— b <sub>n</sub>	B <sub>n</sub> ——— a <sub>n</sub>

## ◆PCB mounting pattern



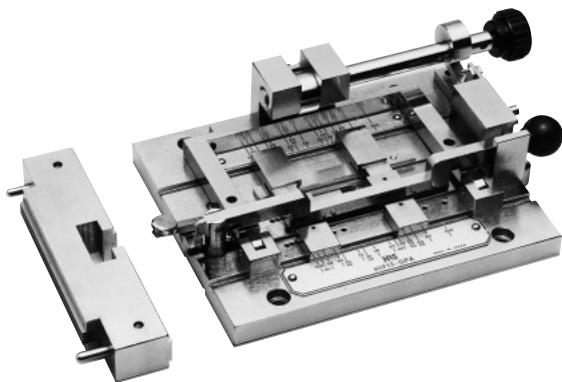
Cable Side  
(40, 52, 60, 68, 80, 100 contacts)



Cable Side  
(34, 50 contacts)

## ◆Connection Jig

### ●Guide Plate



Part Number	CL No.
HIF12-GPA	550-0208-9

### ●Hi-Flex Connection Press



Part Number	CL No.
Hi-Flex Connection Press HHP502	550-0082-2