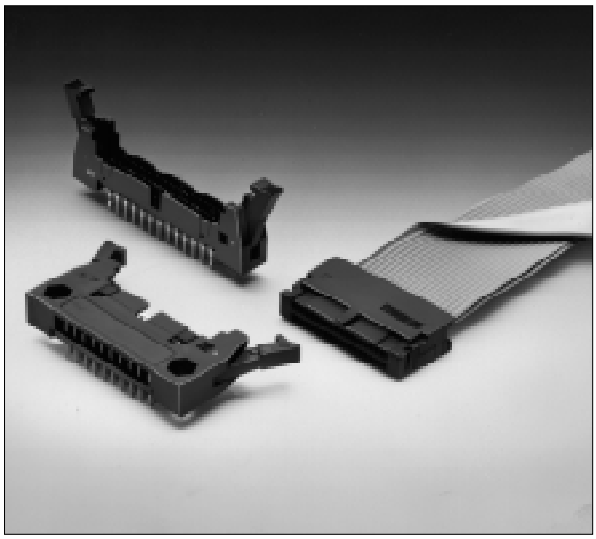
FOR BOARD-TO-CABLE CONNECTION

230 SERIES (FOR FLAT CABLE CONNECTION)

■ FEATURES

- Two 1.27 mm (0.050 in.) pitch flat cables can be used.
- 1.27 mm (0.05 in.) pitch contact arrangement in two rows and terminal arrangement in a four-row staggered array (2.54 mm × 1.905 mm) (0.100 × 0.075 in.) enable high-density mounting.
- The socket kit is comprised of two IDC sockets (body 1, body 2). After IDC termination, the bodies are "snapped" together to form one complete socket assembly.
- Connectors with 20 to 100 contacts are available.
- Latch mechanism provides easy disconnection.
- A clip-on key prevents incorrect insertion of a connector when two or more connectors with the same number of contacts are mounted on a PC board.



■ SPECIFICATIONS

Item	Specifications
Operating temperature range	–55°C to +105°C
Current rating	DC 0.5 A
Voltage rating	AC 240 V
Contact resistance	30 mΩ max. (DC 6 V, 0.1A)
Insulation resistance	1000 MΩ min. (DC 500 V)
Dielectric withstand voltage	AC 750 V for 1 minute
Insertion force	3 kg max. (20 contacts)
Withdrawal force	0.4 kg min. (20 contacts)
Applicable wire	1.27 mm (0.050 in.) flat cable AWG #28 (stranded wire)

■ MATERIALS

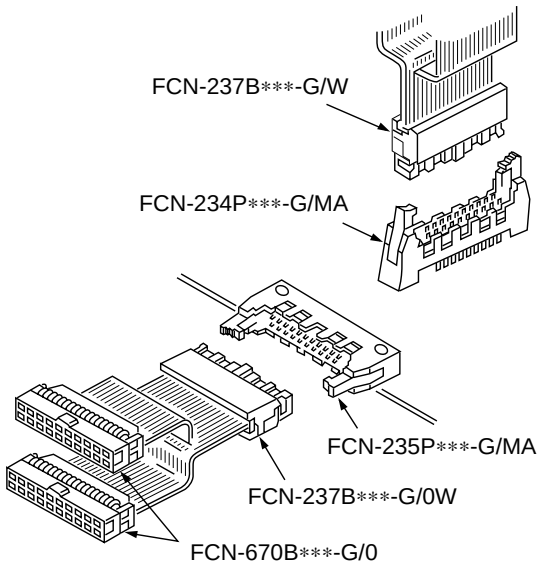
Item	Materials	
Insulator	Polyester	
Conductor	Copper alloy	
Plating	Contact	Gold plating
	Terminal	Palladium plating

■ ORDERING CODE

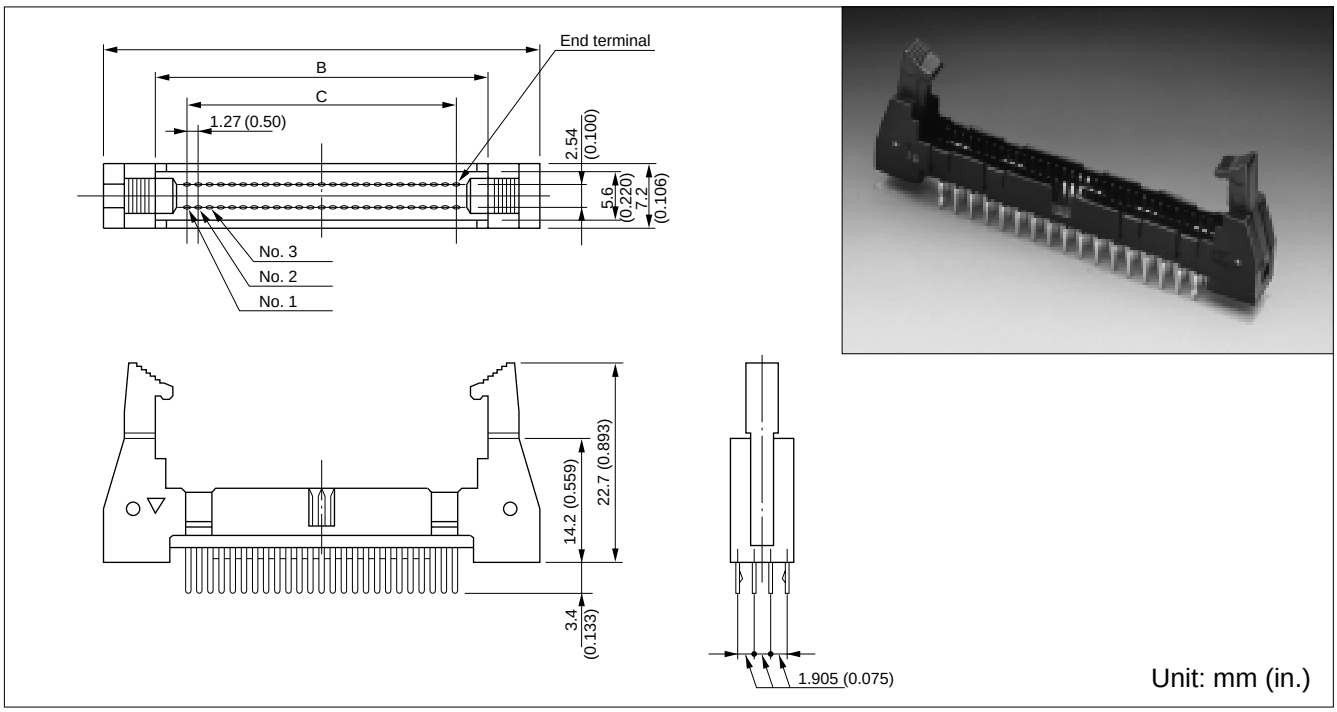
FCN-23 4 P 040-G / M A

- A: Others
- M: With a latch
  W: Insulation displacement connection
- G: Plating
  G: Gold plating
- 040: Number of contacts: 20, 26, 34, 40, 50, 52, 60, 68, 80, and 100
- P: Body
  P: Plug
  B: Socket
- 4: Tail type
  4: Straight
  5: Right-angle
  7: Insulation displacement connection
- 23: 230 series connector
- FCN: Fujitsu connector

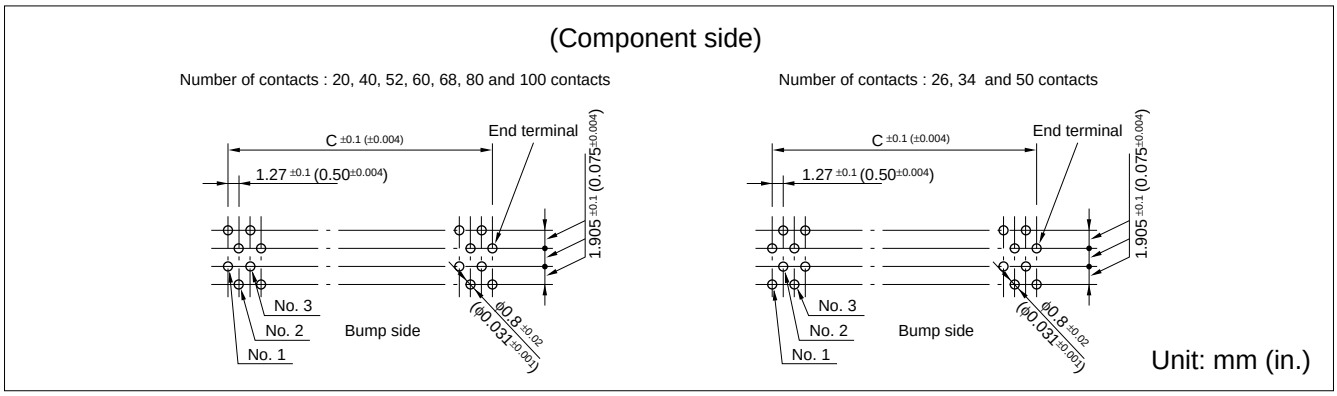
■ APPLICATIONS



STRAIGHT PLUG
■ DIMENSIONS



■ MOUNTING HOLE LAYOUT



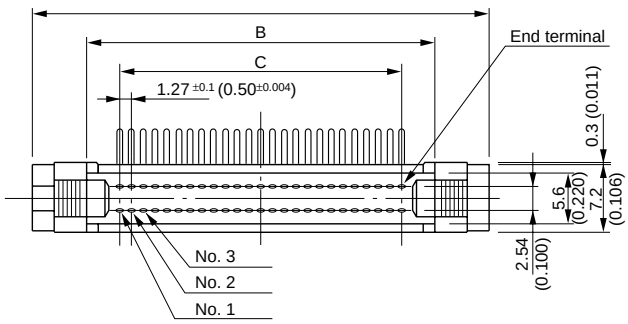
■ PART NUMBERS AND DIMENSIONS

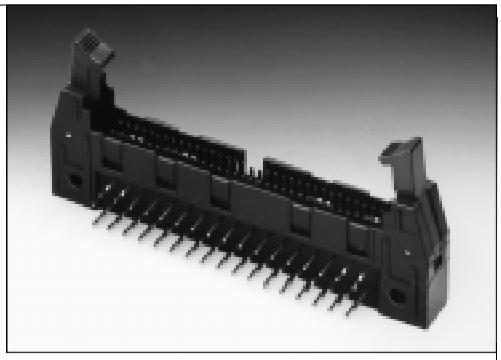
Number of contacts	Part number	Dimensions: mm (in.)		
		A	B	C
20	FCN-234P020-G/MA	30.40 (0.035)	18.77 (0.738)	11.43 (0.450)
26	FCN-234P026-G/MA	34.21 (1.346)	22.58 (0.888)	15.24 (0.600)
34	FCN-234P034-G/MA	39.29 (1.546)	27.66 (1.088)	20.32 (0.800)
40	FCN-234P040-G/MA	43.10 (1.656)	31.47 (1.238)	24.13 (0.950)
50	FCN-234P050-G/MA	49.45 (1.946)	37.82 (1.488)	30.48 (1.200)
52	FCN-234P052-G/MA	50.72 (1.996)	39.09 (1.538)	31.75 (1.250)
60	FCN-234P060-G/MA	55.80 (2.196)	44.17 (1.738)	36.83 (1.450)
68	FCN-234P068-G/MA	60.88 (2.396)	49.25 (1.938)	41.91 (1.650)
80	FCN-234P080-G/MA	68.50 (2.696)	56.87 (2.238)	49.53 (1.950)
100	FCN-234P100-G/MA	81.20 (3.196)	69.57 (2.738)	62.23 (2.450)

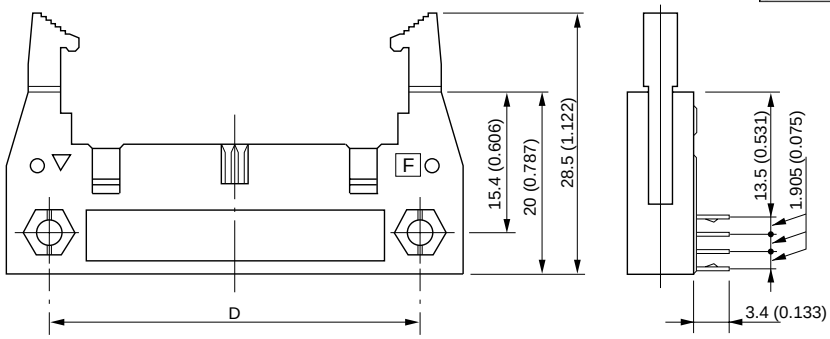
The connectors listed above have clinched retention tails. This series also includes connectors with tails which are not clinched for retention. Specify a part number by replacing -G/MA at the end with -G/MB.

RIGHT-ANGLE PLUG

■ DIMENSIONS





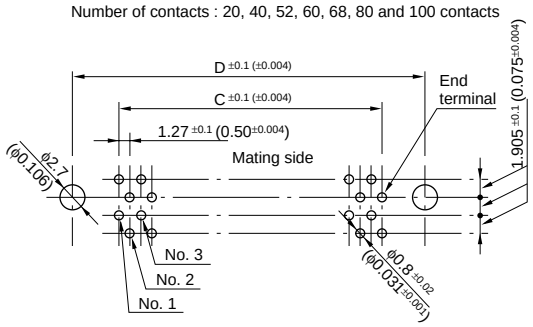


Unit: mm (in.)

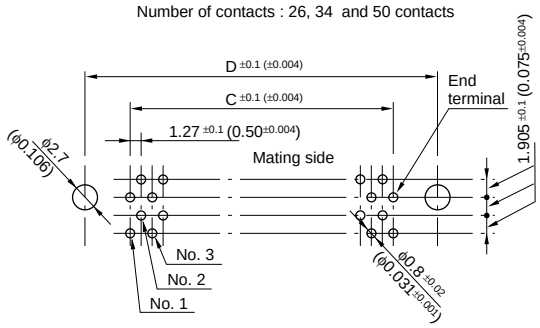
■ MOUNTING HOLE LAYOUT

(Component side)

Number of contacts : 20, 40, 52, 60, 68, 80 and 100 contacts



Number of contacts : 26, 34 and 50 contacts



Unit: mm (in.)

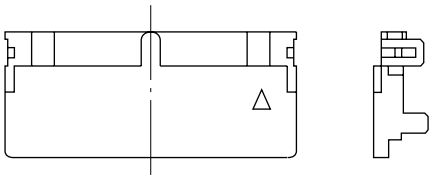
■ PART NUMBERS AND DIMENSIONS

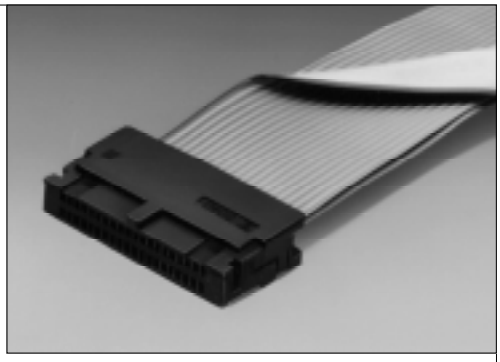
Number of contacts	Part number	Dimensions: mm (in.)			
		A	B	C	D
20	FCN-235P020-G/MA	30.40 (0.035)	18.77 (0.738)	11.43 (0.450)	21.59 (0.850)
26	FCN-235P026-G/MA	34.21 (1.346)	22.58 (0.888)	15.24 (0.600)	25.40 (1.000)
34	FCN-235P034-G/MA	39.29 (1.546)	27.66 (1.088)	20.32 (0.800)	30.48 (1.200)
40	FCN-235P040-G/MA	43.10 (1.656)	31.47 (1.238)	24.13 (0.950)	34.29 (1.350)
50	FCN-235P050-G/MA	49.45 (1.946)	37.82 (1.488)	30.48 (1.200)	40.64 (1.600)
52	FCN-235P052-G/MA	50.72 (1.996)	39.09 (1.538)	31.75 (1.250)	41.91 (1.650)
60	FCN-235P060-G/MA	55.80 (2.196)	44.17 (1.738)	36.83 (1.450)	46.99 (1.850)
68	FCN-235P068-G/MA	60.88 (2.396)	49.25 (1.938)	41.91 (1.650)	52.07 (2.050)
80	FCN-235P080-G/MA	68.50 (2.696)	56.87 (2.238)	49.53 (1.950)	59.69 (2.350)
100	FCN-235P100-G/MA	81.20 (3.196)	69.57 (2.738)	62.23 (2.450)	72.39 (2.850)

The connectors listed above have clinched retention tails. This series also includes connectors with tails which are not clinched for retention. Specify a part number by replacing -G/MA at the end with -G/MB.

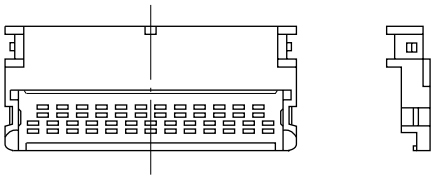
SOCKET
■ DIMENSIONS

[Body 1]

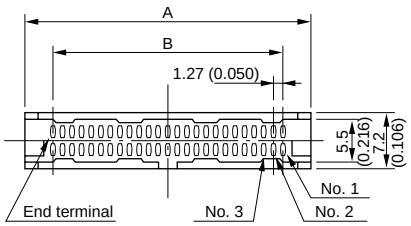




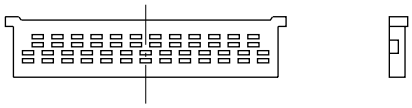
[Body 2]

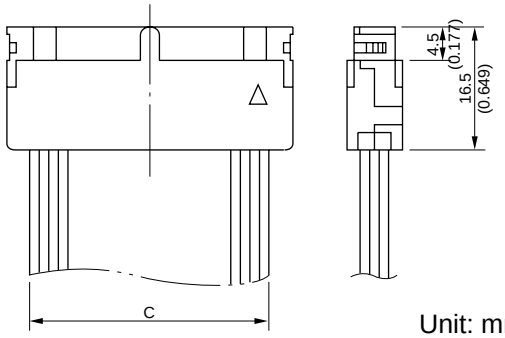


[Connection diagram]



[Connector cover with IDC holders (for main bodies 1 and 2)]





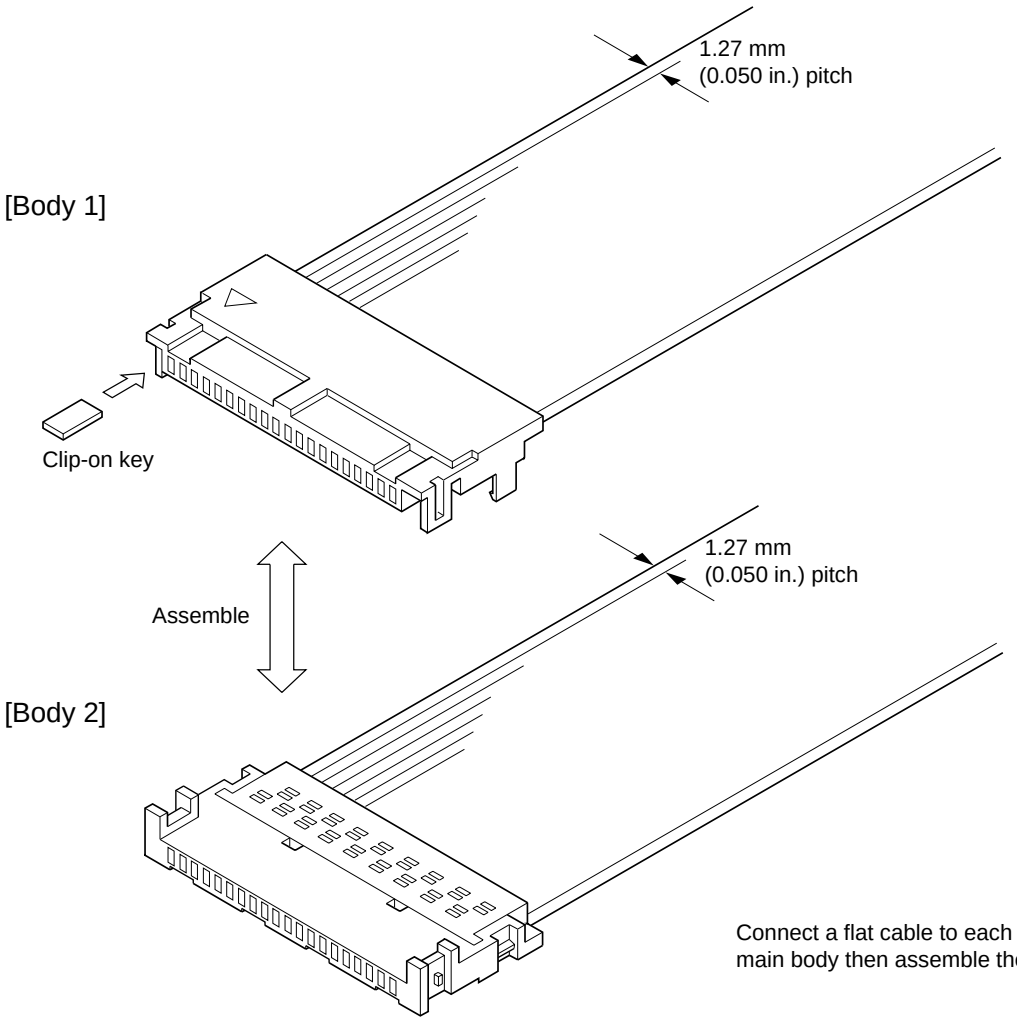
Unit: mm (in.)

■ PART NUMBERS AND DIMENSIONS

Number of contacts	Part number	Dimensions: mm (in.)		
		A	B	C
20	FCN-237B020-G/W	18.57 (0.731)	11.43 (0.450)	12.70 (0.500)
26	FCN-237B026-G/W	22.38 (0.881)	15.24 (0.600)	16.51 (0.650)
34	FCN-237B034-G/W	27.46 (1.081)	20.32 (0.800)	21.59 (0.850)
40	FCN-237B040-G/W	31.27 (1.231)	24.13 (0.950)	25.40 (1.000)
50	FCN-237B050-G/W	37.62 (1.481)	30.48 (1.200)	31.75 (1.250)
52	FCN-237B052-G/W	38.89 (1.531)	31.75 (1.250)	33.02 (1.300)
60	FCN-237B060-G/W	43.97 (1.731)	36.83 (1.450)	38.10 (1.500)
68	FCN-237B068-G/W	49.05 (1.931)	41.91 (1.650)	43.18 (1.700)
80	FCN-237B080-G/W	56.67 (2.231)	49.53 (1.950)	50.80 (2.000)
100	FCN-237B100-G/W	69.37 (2.731)	62.23 (2.450)	63.50 (2.500)

See page 2-39 for IDC tools.

■ HARNESS SHAPE

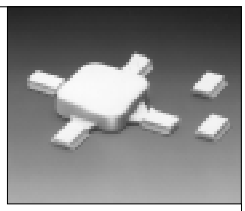


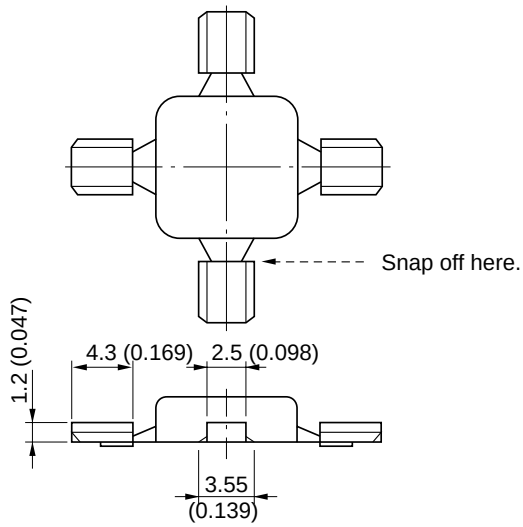
Connect a flat cable to each DC connector main body then assemble the main hodise.

Unit: mm (in.)

■ ACCESSORY

Clip-on keys
Part number: FCN-230A1





Unit: mm (in.)

IDC TOOLS

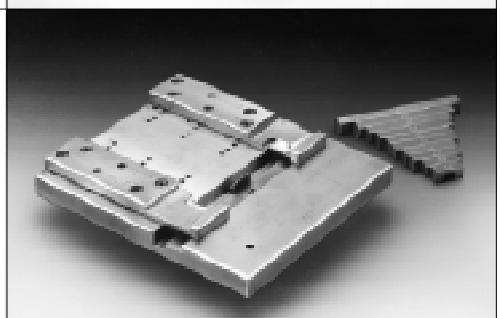
Hand press

FCN-707T-T101/H

Cable cutter

FCN-707T-T001/H

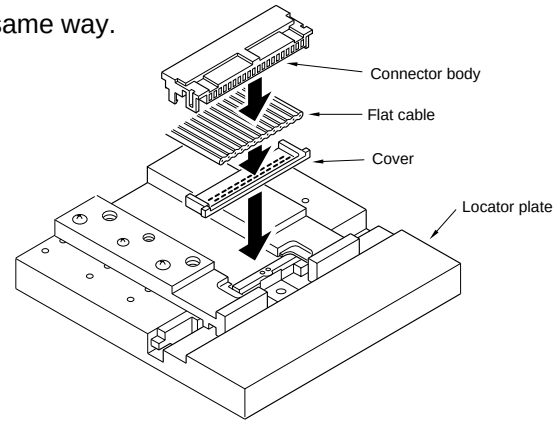
Locator plate



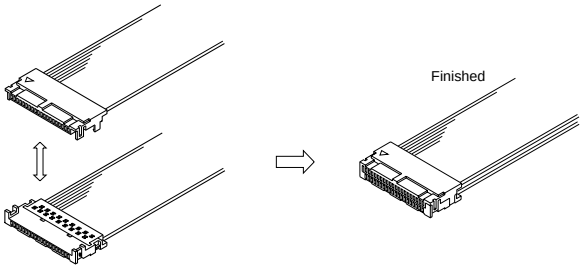
FCN-237T-T058/H

■ CONNECTION PROCEDURE (OUTLINE)

1. Cut the flat cable with the cable cutter (cut perpendicular to the cable in the same way as for conventional MIL types).
2. Position the cover, flat cable, and connector body on the locator plate, then make connection using the hand press.
3. Connect the other connector body in the same way.



4. Assemble the connector bodies.



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