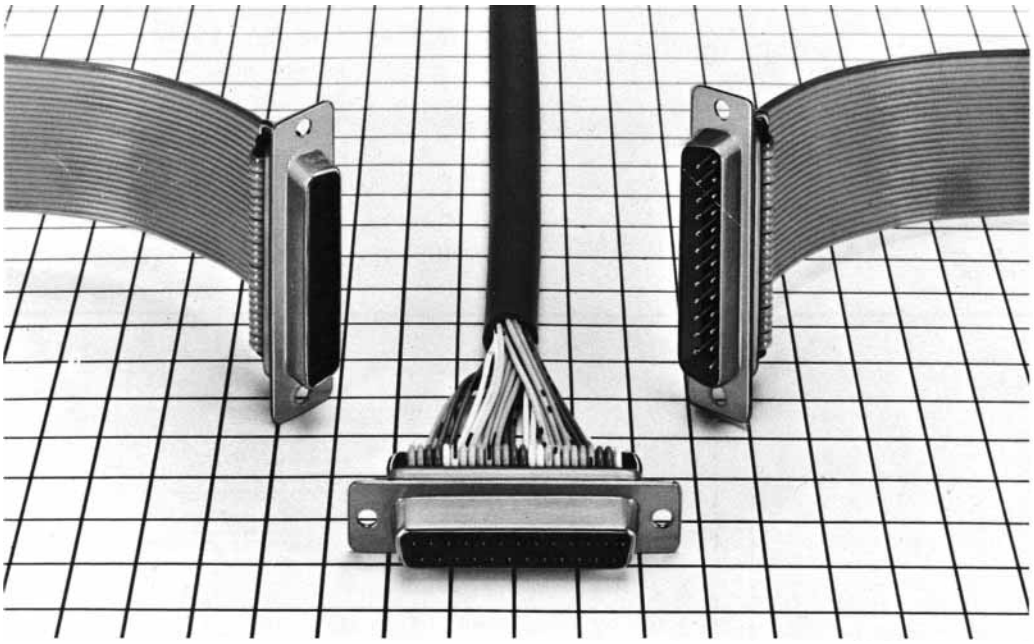
RIBBON-CABLE LOW-PROFILE FD CONNECTORS

General

The low-profille FD series are rectangular multi-contact connectors for ribbon-cable IDC termination. The FD Series are most useful for labor-saving in connection work and enhancing wiring reliability.

The profile has been minimized to meet the customer needs for smaller devices. 9, 15, 25 and 37-contact models are available.



Features

(1) Compact and sturdy due to metal shell.
(2) Can be mounted on the front or back of a panel or chasis as necessary.
(3) Much lower Profile to permit miniaturization.
(4) Fixes the cable securely by fitting the ribbon cable clamp with a metal plate in the connector.
(5) Cables, including standard pitch (1.27mm) ribbon cables, as well as those with 1.38mm pitch (equal to the D sub), can be connected by replacing the jig (a jig is required for slit cables).
(6) Discrete cables can be connected by using a multi-core cable IDC terminator.

Application

Computers, peripherals and terminals, radio equipment, and control equipment.

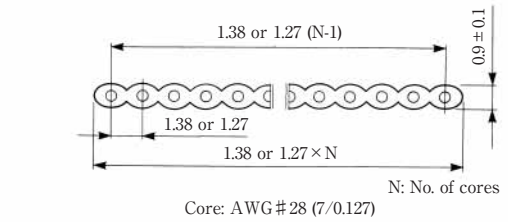
Electrical and Environmental

Electrical and Environmental Characteristics	
Current rating	1A
Voltage rating	200V AC
Insulation resistance	1,000MΩ min. at 500V DC
Contact resistance	25mΩ max. at 100mA DC
Withstand voltage	650Vr.m.s. AC for one minute

Material and Finish		
Shell	Steel	Nickel plating
Insulator	PBT	Black
Contacts	Beryllium Copper	Nickel plating + gold plating

※UL94V-0

Cable specifications



Core: AWG#28 (7/0.127)

Ordering Informations

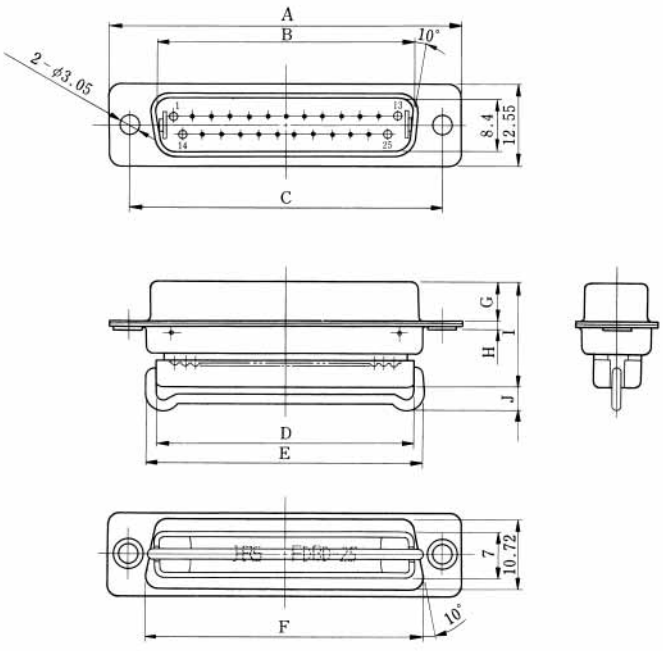
F D B D — 25 P F (55)

(1) (2) (3) (4) (5) (6) (7)

(1) Series Name FD: Insulation displacement termination
(2) Shell size E, A, B, C
(3) Serial sign for series
(4) No. of pin 9, 15, 25, 37
(5) Type of contacts
P: Male contact
S: Female contact
(6) F: Shell dimpled (male connector only)
(7) (55) Nickel-plated shell

Pin Connector

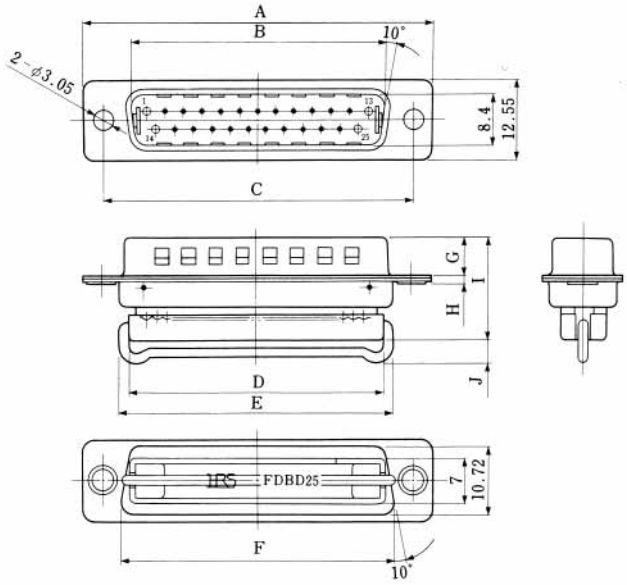
FDBD-25P (55)



Unit: mm

HRS No	No.of pin	Part No.	A	B	C	D	E	F	G	H	I	J	RoHS
CL211-0444-4-55	9	FDED-9P (55)	30.81	16.9	24.99	16.9	19	19.28	5.99	1.2	15.67	2.7	YES
CL211-0446-0-55	15	FDAD-15P (55)	39.14	25.24	33.32	25.27	27.2	27.55	5.99	1.2	15.67	2.7	
CL211-0448-5-55	25	FDBD-25P (55)	53.04	39.01	47.04	39	41.4	41.28	5.87	1.3	15.67	3.2	
CL211-0450-7-55	37	FDCD-37P (55)	69.32	55.47	63.5	55.4	57.9	57.71	5.87	1.4	15.67	3.2	

FDBD-25PF (55)

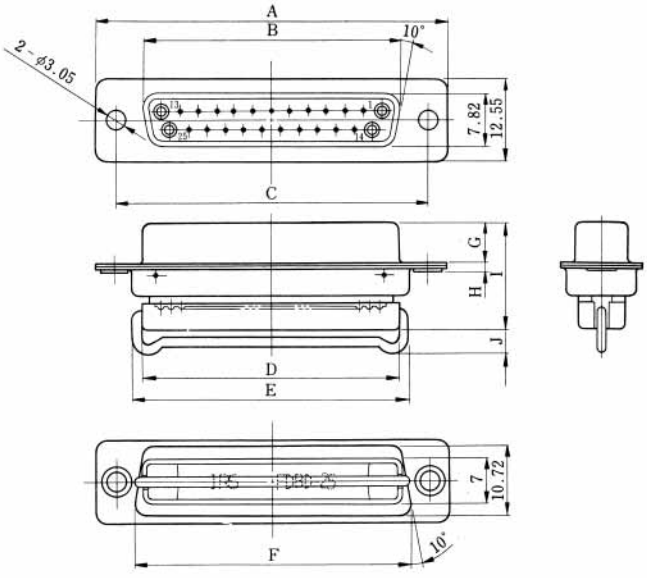


Unit: mm

HRS No	No.of pin	Part No.	A	B	C	D	E	F	G	H	I	J	RoHS
CL211-0604-9-55	9	FDED-9PF (55)	30.81	16.9	24.99	16.9	19.0	19.28	5.99	1.2	15.67	2.7	YES
CL211-0605-1-55	15	FDAD-15PF (55)	39.14	25.24	33.32	25.27	27.2	27.55					
CL211-0606-4-55	25	FDBD-25PF (55)	53.04	39.01	47.04	39.0	41.4	41.28	5.87	1.3		3.2	
CL211-0607-7-55	37	FDCD-37PF (55)	69.32	55.47	63.5	55.4	57.9	57.71		1.4			

Female Connector

FDBD-25S (55)



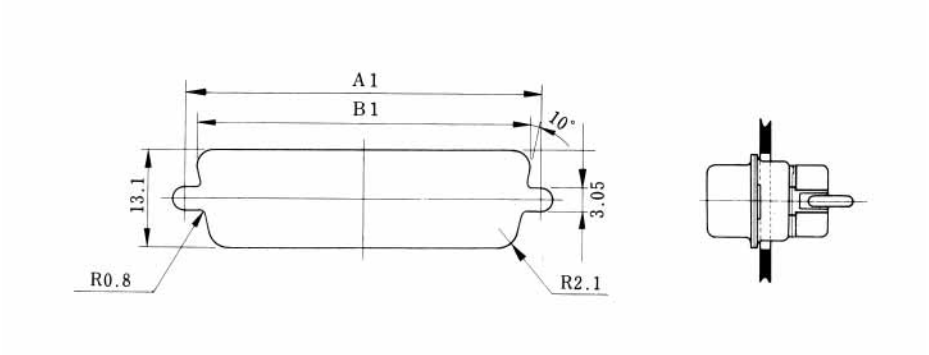
Unit: mm

HRS No	No.of pin	Part No.	A	B	C	D	E	F	G	H	I	J	RoHS
CL211-0445-7-55	9	FDED-9S (55)	30.81	16.4	24.99	16.9	19	19.28	6.17	1.2	15.67	2.7	YES
CL211-0447-2-55	15	FDAD-15S (55)	39.14	24.59	33.32	25.27	27.2	27.55	6.17	1.2	15.67	2.7	
CL211-0449-8-55	25	FDBD-25S (55)	53.04	38.3	47.04	39	41.4	41.28	6.17	1.2	15.67	3.2	
CL211-0451-0-55	37	FDCD-37S (55)	69.32	54.76	63.5	55.4	57.9	57.71	6.17	1.2	15.67	3.2	

Connector Mounting Method and Mounting Dimensions

Connector mounted on the face of the panel (front mounting)

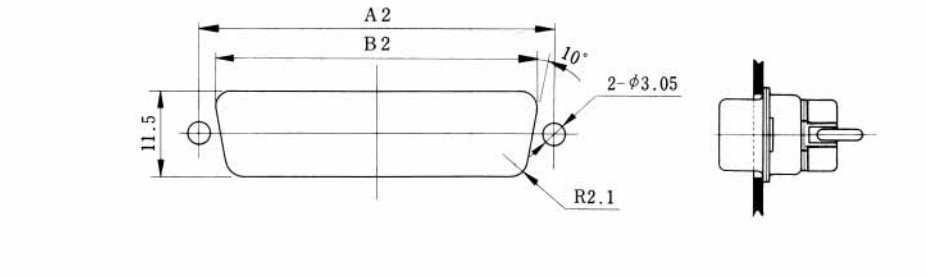
Note: A slight gap will appear between connector and panel since the connector must be plugged to the back of the panel.



Unit: mm

Shell size	A1	B1
E	24.99	22
A	33.32	30.3
B	47.04	44
C	63.5	60.5

Connector mounted on the back of the panel (rear mounting)



Unit: mm

Shell size	A2	B2
E	24.99	20.2
A	33.32	28.6
B	47.04	42.5
C	63.5	59.2

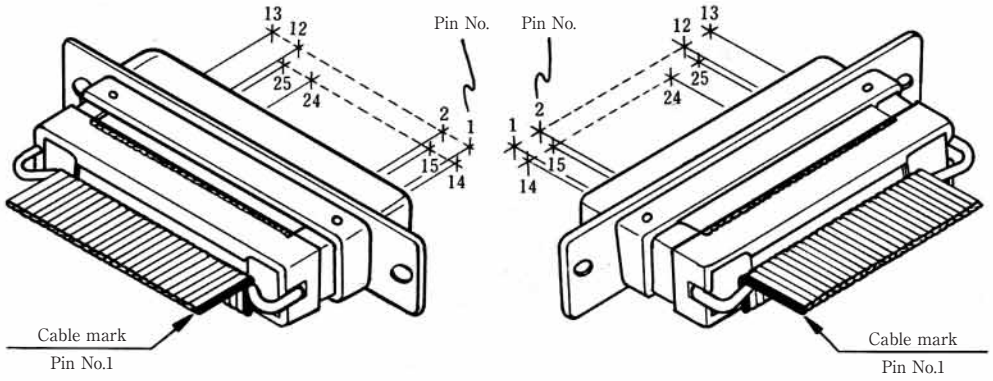
Cabling Variations

▶Connecting Type

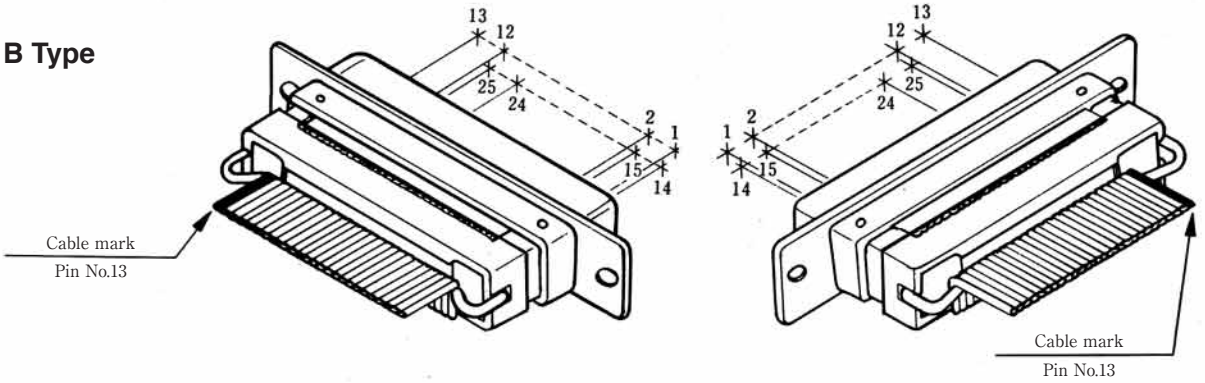
FDBD-25P
Male Connector

FDBD-25S
Male Connector

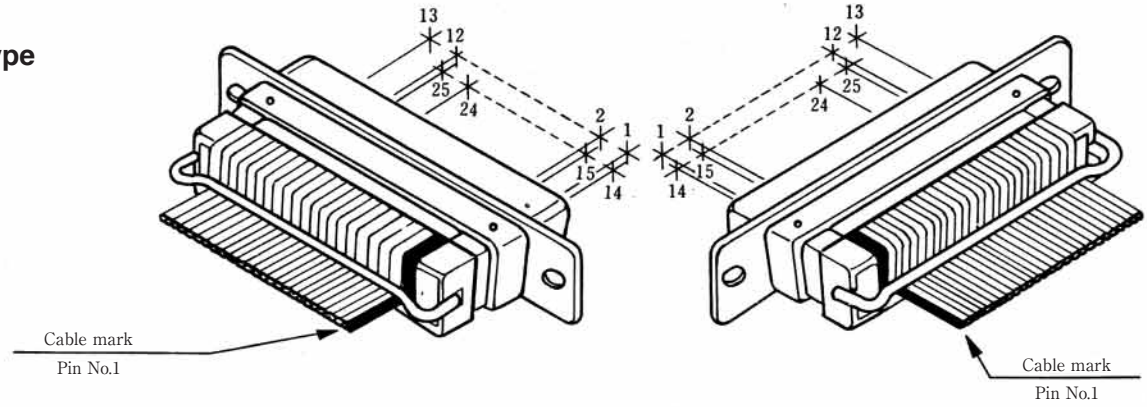
A Type



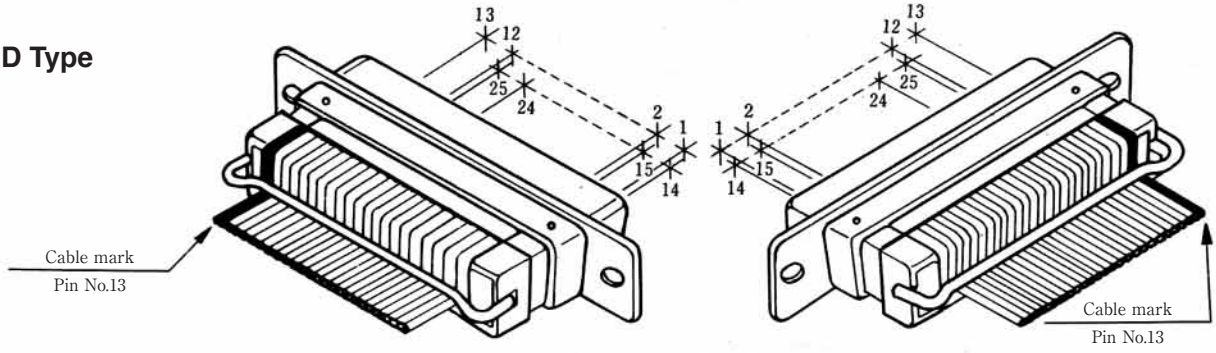
B Type



C Type



D Type



Termination tools list for FD*D series

1) For terminating the FD*D series, select tools from the list below according to the cable used.

<table>
<tr><th rowspan="2">Cable</th><th colspan="2">Process before connection
(Slitting the Flat Ribbon Cable)</th><th colspan="3">Insulation Displacement Connection</th><th rowspan="2">Process after connection</th></tr>
<tr><th>Press</th><th>Jig</th><th>Press</th><th>Guide Plate</th><th>Pressure Block</th></tr>
<tr><td>1.38mm pitch 1/0 Cable
(Flat arrangement at each end side)
Flat Ribbon Cable</td><td>—</td><td>—</td><td rowspan="3">HIF
Connecting Press
(universal type)
CL550-0082-2</td><td>FDXD-1.38GP
(Universal type)
CL902-0021-3</td><td rowspan="3">Pressure Block
(Please refer to below table)</td><td>—</td></tr>
<tr><td>1.27mm pitch Slit Flat Ribbon Cable Descrete Wires</td><td>—</td><td>—</td><td>*1 (see note) FDXD-1.27GP
(Universal type)
(For Discrete Wire or Slit Flat Ribbon Cable)
CL902-0025-8</td><td rowspan="2">FDXD-C
(Universal type)
(Cable Shear for trimming Cable ends.)
CL902-0029-9</td></tr>
<tr><td>1.27mm pitch
Flat Ribbon Cable</td><td>HIF Connecting Press CL550-0082-2</td><td>FDXD-ST Slitting Jig
(Universal type)
CL902-0028-6</td><td>*2 (see note)
FDXD-1.27GPF
(Universal type)
(For Flat Ribbon Cable)
CL902-0026-0</td></tr>
</table>

2) Pressure Block

Application connector	Part No.	HRS No
FDED-9P(55)	FDE-P	CL902-0006-3
FDED-9S(55)	FDE-S	CL902-0007-6
FDED-15P(55)	FDA-P	CL902-0009-1
FDED-15S(55)	FDA-P	CL902-0010-0
FDED-25P(55)	FDB-P	CL902-0003-5
FDED-25S(55)	FDB-S	CL902-0004-8
FDED-37P(55)	FDC-P	CL902-0012-6
FDED-37S(55)	FDC-S	CL902-0013-9

Note) By changing Wire-Guide-Plate, this Guide Plate can be used for both *1 and *2.

Cable	Part No.	HRS No
Discrete Wire	FDXD-1.27 Discrete Wire Gulde Plate	CL902-0041-4
Flat Cable	FDXD-1.27 Flat Cable Gulde Plate	CL902-0042-7