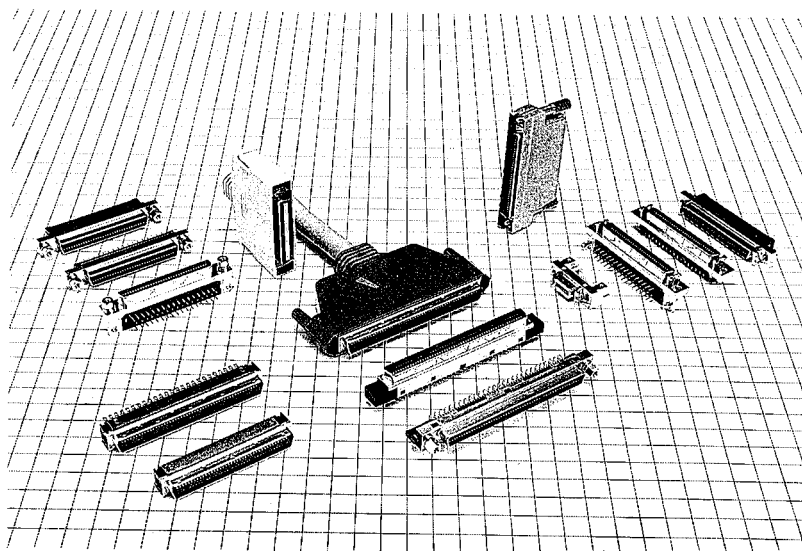


## DXM (1.27MM PITCH) SERIES HIGH-DENSITY I/O CONNECTOR

### General

DXM series high-density I/O connectors with bellow contacts are perfect for tomorrow's miniaturized electronic devices. This new 1.27mm (0.050") interconnect design ensures positive locking, effortless coupling, terminal protection and EMI reduction in a miniaturized and rugged package. DXM series offer you one of the

most varied and complete lines of High-Density connectors in the world, i.e. IDC and Solder for the plug and right angle dip, straight dip, IDC and SMT for the receptacle. Available in 14, 20, 26, 36, 50, 68, 80, 100 and 110 way.



### Features

1. 1.27mm (0.050") contact spacing conserves valuable board space and permits ultra-high density designs.
2. Bellow contacts create smooth and precise mating and unmating.
3. Unique shell design assures first make/last break grounding and overall noise protection.
4. IDC termination allows quick and low cost termination to AWG #28 wires.
5. Backshell and receptacle shell are made of die-cast zinc alloy or stainless steel to reduce the penetration of external EMI noise.
6. Ferrite added to DX Right Angle Dip Type for EMI Protection is available.
7. Overmold backshell provided for ESD protection is available in 'One-Touch' locking and 'Screw' locking.
8. Termination methods are available in IDC, Soldering, Right Angle Dip, Straight Dip and SMT.

### Applications

Office Automation, Computers, Measurement, Communication and Control Equipment, Factory Automation, Home Automation and other commercial applications needing high density interconnections.

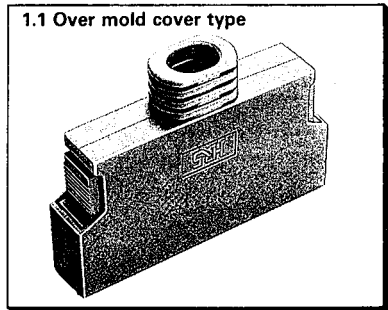
### Specifications

Items	Standard value
Current capacity	0.5A
Rated voltage	AC125V
Insulation resistance	250M $\Omega$ or more at DC100V
Contact resistance	35m $\Omega$ or less at DC100mA
Withstanding voltage	AC 300Vr.m.s. for 1 minute

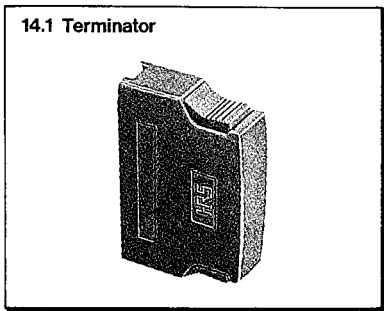
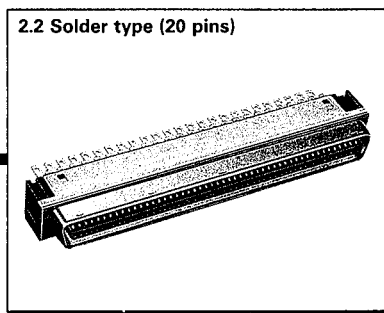
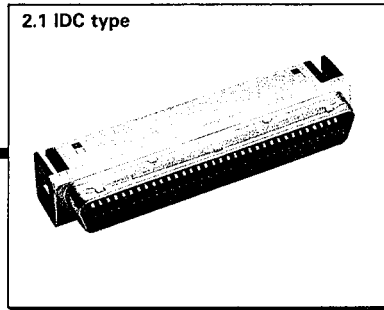
## DXM Series Variations

### ● One-touch lock type (14, 20, 26, 36, 50, 68 pins)

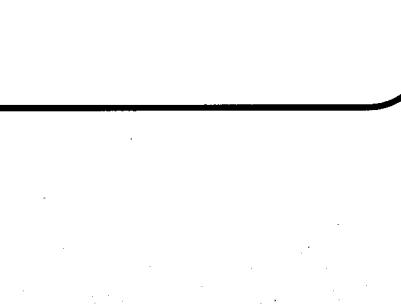
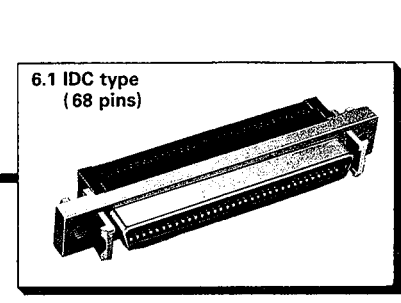
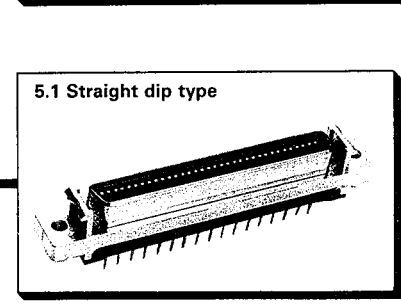
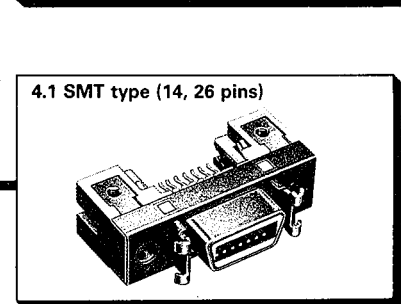
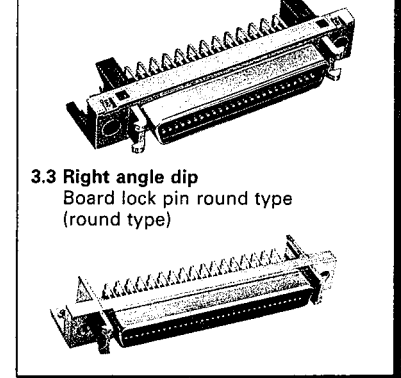
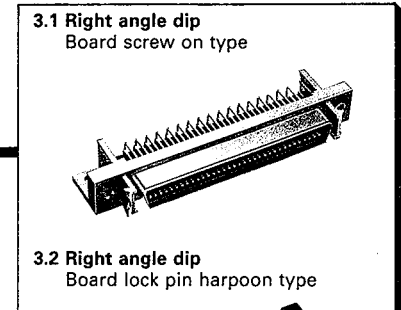
#### Plug cover



#### Plug



#### Receptacle

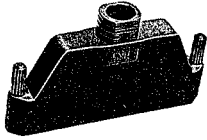


## ● Screw lock type (68, 80, 100, 110 pins)

Overmold cover type (100, 110 pins)

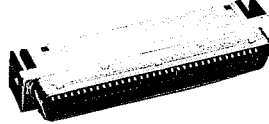
### Plug cover

7.1 Over mold cover type

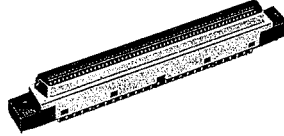


### Plug

2.1 IDC type

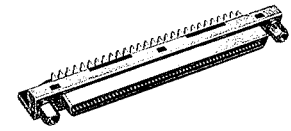


13.1 Straight dip (110 pins)

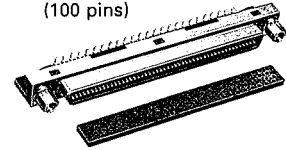


### Receptacle

8.2 Right angle dip  
Board lock pin harpoon type



9.1 Right angle dip  
Ferrite core type  
(100 pins)



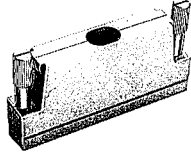
10.1 SMT type (100 pins)



Die cast cover (68, 80, 100 pins)

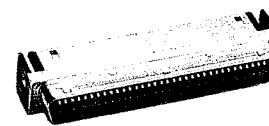
### Plug cover

7.2 Die cast cover type

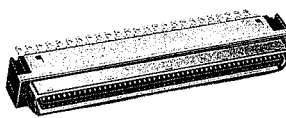


### Plug

2.1 IDC type

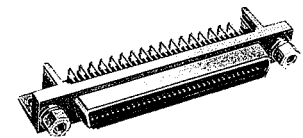


2.2 Solder type (100 pins)

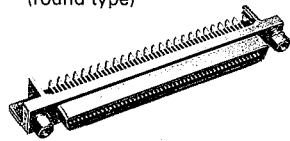


### Receptacle

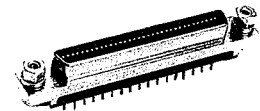
8.1 Right angle dip  
Board screw on type



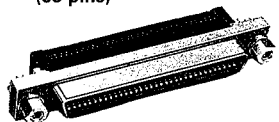
8.3 Right angle dip  
Board lock pin round type  
(round type)



11.1 Straight dip type



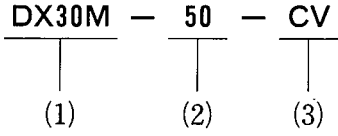
12.1 IDC type  
(68 pins)



Note: There is no interchangeability between the locks of the die cast cover type and overmold type.

## 1. One Touch Lock Plug Cover

### Ordering Information

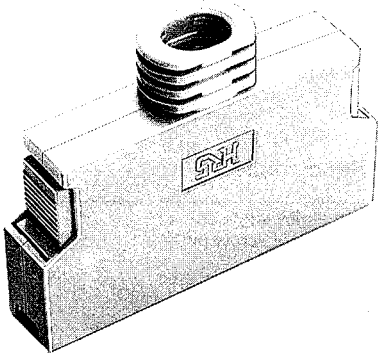


- 1) Series number: DX30M
- 2) No. of pins: 14, 20, 26, 36, 50, 68
- 3) Cover case type  
 CV: Over mold cover case

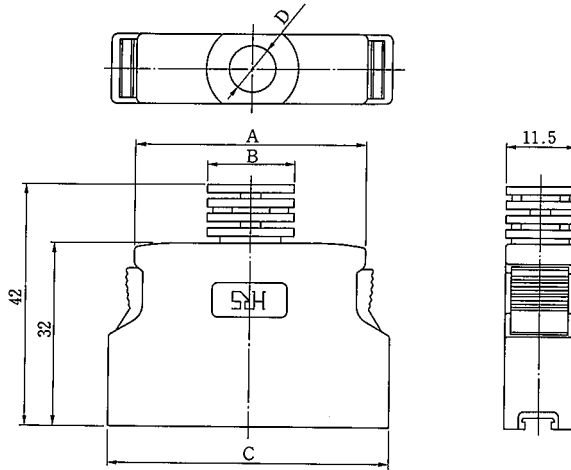
### Material Treatment

Item	Material	Treatment
Overmold cover case	Synthetic resin, Stainless	Light beige

### 1.1 Overmold Cover



CL230-5056-0-10  
 DX30M-68-CV(10)



Unit (mm)

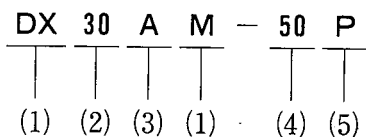
HRS No.	No. of pin	Parts No.	A	B	C	D	Applicable plug unit	
							IDC type	Solder type
CL230-5051-7-10	14	DX30M-14-CV(10)	17.09	11.50	25.79	φ 6.3	DX30AM-14P	—
CL230-5052-0-10	20	DX30M-20-CV(10)	20.90	14.50	29.60	φ 6.7	DX30AM-20P	DX40M-20P
CL230-5053-2-10	26	DX30M-26-CV(10)	24.80	15.00	33.50	φ 7.0	DX30AM-26P	—
CL230-5054-5-10	36	DX30M-36-CV(10)	31.06	15.75	39.80	φ 8.1	DX30AM-36P	—
CL230-5055-8-10	50	DX30M-50-CV(10)	39.95	16.00	48.70	φ 8.7	DX30AM-50P	—
CL230-5056-0-10	68	DX30M-68-CV(10)	51.38	17.57	60.13	8.7 × 10.27	DX30AM-68P	—

### General List of Engagement Combinations

Cover case and plug unit	Receptacle			
	Right angle type	SMT type	Straight type	IDC type
DX30M-14-CV(10) + DX30AM-14-P	DX10M-14S(E), DX10GM-14SE	DX10MS-14ST2	DX20M-14S	—
DX30M-20-CV(10) + DX30AM-20-P	DX10M-20S(E), DX10GM-20SE	—	DX20M-20S	—
DX30M-26-CV(10) + DX30AM-26-P	DX10M-26S(E), DX10GM-26SE	DX10MS-26ST*	DX20M-26S	—
DX30M-36-CV(10) + DX30AM-36-P	DX10M-36S(E), DX10GM-36SE	—	DX20M-36S	DX33AM-36S
DX30M-50-CV(10) + DX30AM-50-P	DX10M-50S(E), DX10GM-50SE	—	DX20M-50S	DX33AM-50S
DX30M-68-CV(10) + DX30AM-68-P	DX10M-68S(E), DX10GM-68SE	—	DX20M-68S	DX33AM-68S

## 2. Plug Unit (Interchangeable One Touch-Screw Lock Type)

### Ordering Information



Note: This connector can be used for one touch lock cover and screw lock cover.

- 1) Series No.: DX--M
- 2) Wiring style 30: Discrete cable IDC (for fine wire use)  
40: Solder type
- 3) Applicable wire A: AWG #28 (Discrete cable press-fit type)
- 4) No. of pins: 14, 20, 26, 36, 50, 68, 80, 100, 110
- 5) Mating type P: Plug

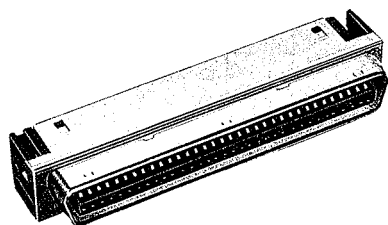
### Material Treatment

Item	Material	Remarks
shell	Steel	Nickel plating
Insulator	PBT	Black (UL94V-0)
Male terminal	Copper alloy	Selective gold plating

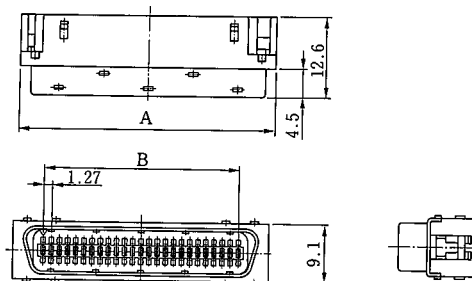
### Applicable

	Interface cable		
	Discrete cable fine wire type	Solder type	
Conductor size	AWG #28		
Conductor composition	7/0.127		
o.d. of insulator	0.58	0.62	0.58
	UL20276 and UL2789	UL2990	UL20276 and UL2789

### 2.1 Discrete Cable IDC Type (for Fine Wire)



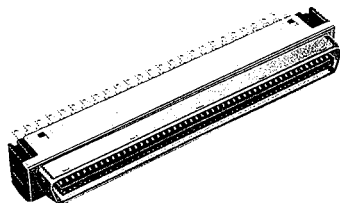
CL230-5029-8  
DX30AM-68P



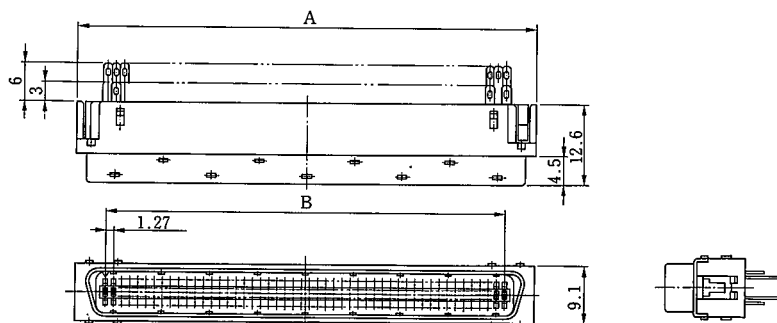
Unit (mm)

HRS No.	No. of Pin	Parts No.	A	B	Applicable cover case	
					One touch lock type	Screw lock type
CL230-5024-4	14	DX30AM-14P	17.09	7.62	DX30M-14-CV	—
CL230-5025-7	20	DX30AM-20P	20.90	11.43	DX30M-20-CV	—
CL230-5026-0	26	DX30AM-26P	24.71	15.24	DX30M-26-CV	—
CL230-5027-2	36	DX30AM-36P	31.06	21.59	DX30M-36-CV	—
CL230-5028-5	50	DX30AM-50P	39.95	30.48	DX30M-50-CV	—
CL230-5029-8	68	DX30AM-68P	51.38	41.96	DX30M-68-CV	DX30M-68-CV2
CL230-5030-7	80	DX30AM-80P	59.00	49.53	—	DX30M-80-CV2
CL230-5031-0	100	DX30AM-100P	71.70	62.23	—	DX30M-100-CV1 · 2
CL230-5064-9	110	DX30AM-110P	78.05	68.53	—	DX30M-110-CV1

### 2.2 Solder Type



CL230-5039-1  
DX40M-100P



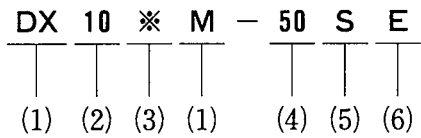
Unit: mm

HRS No.	No. of pins	Product No.	A	B	Applicable cover case	
					One touch lock type	Screw lock type
CL230-5033-5	20	DX40M-20P	20.90	11.43	DX30M-20-CV	—
CL230-5039-1	100	DX40M-100P	71.70	62.23	—	※DX30M-100-CV2

Cannot be used for ※DX30M-100-CV1.

### 3. One Touch Lock, Receptacle Right Angle Type

#### Ordering Information



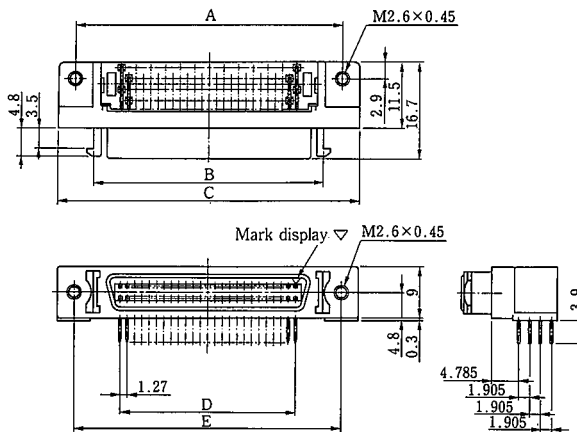
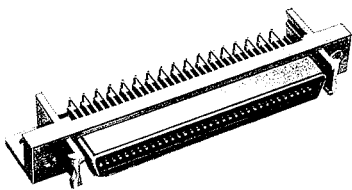
- 1) Series No.: DX--M
- 2) Wiring style 10: Right angle type
- 3) Lock style (one touch lock type)  
 Blank : (Receptacle case material: zinc alloy die cast)  
 G : (Receptacle case material: steel)

- 4) No. of pins: 14, 20, 26, 36, 50, 68
- 5) Mating type S: Receptacle
- 6) Board-fitting type  
 Blank : Screw on type  
 E : Lock pin type

#### Material Treatment

Item	Material	Remarks
Receptacle case	Zinc alloy die cast or steel	Nickel plating
Shell	Steel	Nickel plating
Insulators	PBT	Black (UL94V-0)
Female terminal	Copper alloy	Selective gold plating

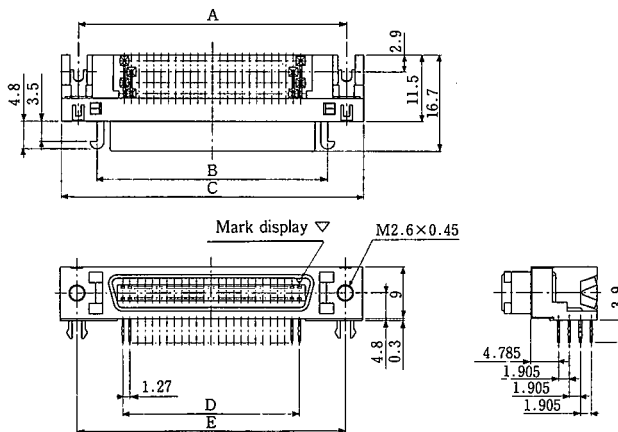
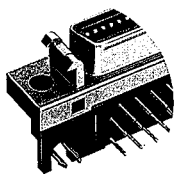
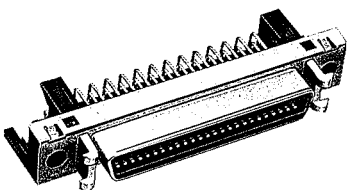
#### 3.1 Board Screw on Type



CL230-5181-2  
DX10GM-68S

HRS No.	No. of Pin	Parts No.	A	B	C	D	E	Unit (mm)
CL230-5223-0	14	DX10G1M-14S	23.64	17.14	29.54	7.62	23.64	
CL230-5177-5	20	DX10GM-20S	27.45	20.95	33.35	11.43	27.45	
CL230-5225-6	26	DX10G1M-26S	31.26	24.76	37.16	15.24	31.26	
CL230-5226-9	36	DX10G1M-36S	37.61	31.11	43.51	21.59	37.61	
CL230-5227-1	50	DX10G1M-50S	46.50	40.00	52.40	30.48	46.50	
CL230-5181-2	68	DX10GM-68S	57.93	51.43	63.83	41.91	57.93	

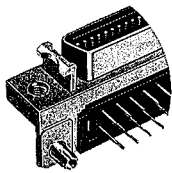
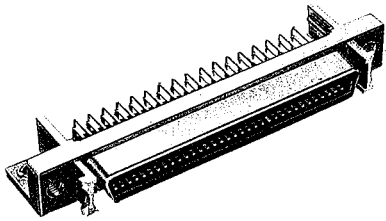
#### 3.2 Board Lock Pin Harpoon Type



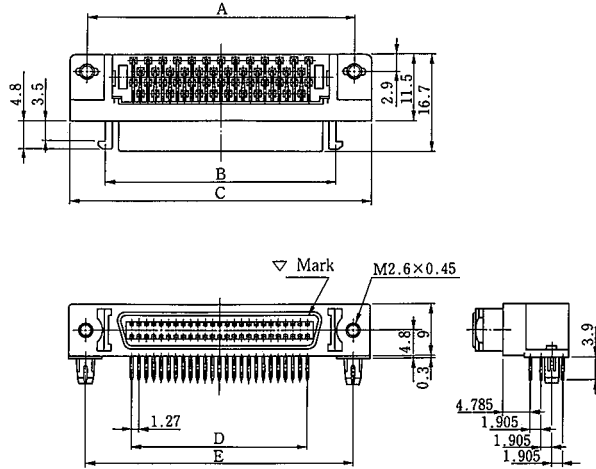
CL230-5214-0  
DX10G1M-50SE

HRS No.	No. of Pin	Parts No.	A	B	C	D	E	Unit (mm)
CL230-5210-9	14	DX10G1M-14SE	23.64	17.14	29.54	7.62	23.64	
CL230-5130-1	20	DX10GM-20SE	27.45	20.95	33.35	11.43	27.45	
CL230-5212-4	26	DX10G1M-26SE	31.26	24.76	37.16	15.24	31.26	
CL230-5213-7	36	DX10G1M-36SE	37.61	31.11	43.51	21.59	37.61	
CL230-5214-0	50	DX10G1M-50SE	46.50	40.00	52.40	30.48	46.50	
CL230-5134-2	68	DX10GM-68SE	57.93	51.43	63.83	41.91	57.93	

### 3.3 Board Lock Pin Round Type

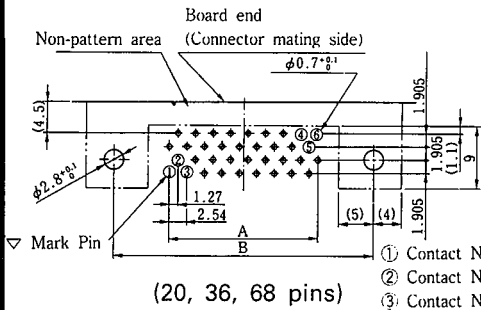


CL230-5071-4  
DX10M-68SE



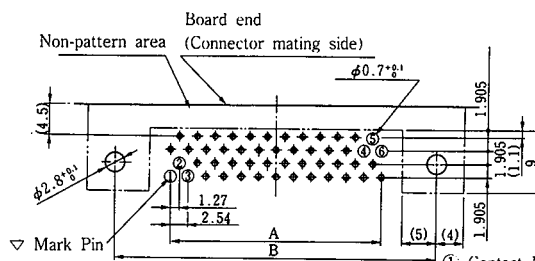
							Unit (mm)	
HRS No.	No. of Pin	Parts No.	A	B	C	D	E	
CL230-5107-0	14	DX10M-14SE	23.64	17.14	29.54	7.62	23.64	
CL230-5067-7	20	DX10M-20SE	27.45	20.95	33.35	11.43	27.45	
CL230-5068-0	26	DX10M-26SE	31.26	24.76	37.16	15.24	31.26	
CL230-5069-2	36	DX10M-36SE	37.61	31.11	43.51	21.59	37.61	
CL230-5070-1	50	DX10M-50SE	46.50	40.00	52.40	30.48	46.50	
CL230-5071-4	68	DX10M-68SE	57.93	51.43	63.83	41.91	57.93	

### PCB Layout (Recommended board thickness:1.6mm)



(20, 36, 68 pins)

- ① Contact No.1
  - ② Contact No.2
  - ③ Contact No.3
  - ④ Contact No.(N-2)
  - ⑤ Contact No.(N-1)
  - ⑥ Contact No.(N)
- ※N:Numbers of Pin



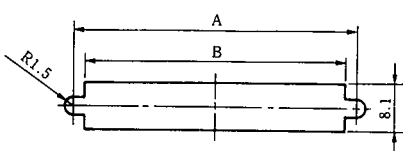
(14, 26, 50 pins)

- ① Contact No.1
  - ② Contact No.2
  - ③ Contact No.3
  - ④ Contact No.(N-2)
  - ⑤ Contact No.(N-1)
  - ⑥ Contact No.(N)
- ※N:Numbers of Pin

			Unit (mm)	
No. of Pin	A	B		
14	7.62	23.64		
20	11.43	27.45		
26	15.24	31.26		
36	21.59	37.61		
50	30.48	46.50		
68	41.91	57.93		

### Panel-Fitting Dimensional Drawing

(Recommended panel thickness:max.2mm)



			Unit (mm)	
No. of Pin	A	B		
14	23.64	19.99		
20	27.45	23.80		
26	31.26	27.60		
36	37.61	33.90		
50	46.50	42.80		
68	57.93	54.23		

## 4. One Touch Lock, Receptacle SMT Type

### Ordering Information

DX 10 ※ M S - 14 S T2

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

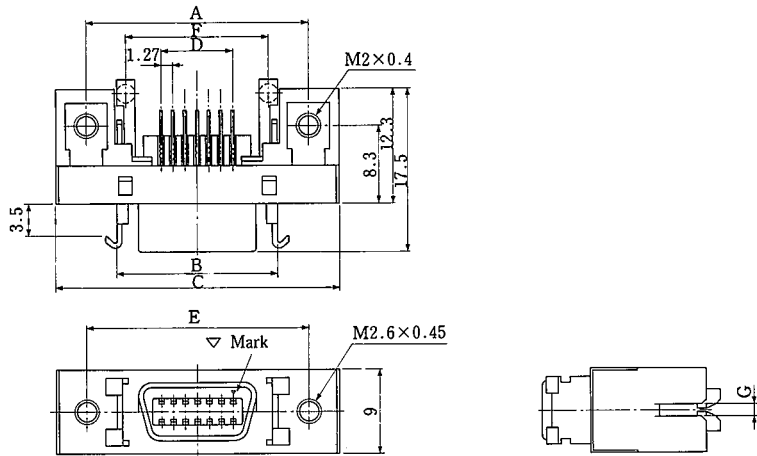
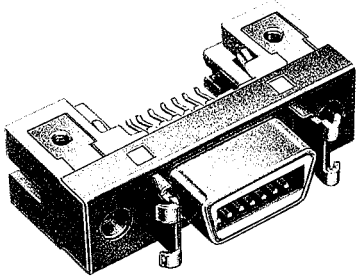
- 1) Series No.: DX--M
- 2) Connector style  
10: Right angle type
- 3) Lock style  
Blank: One touch lock type
- 4) Board mounting style  
S: SMT type

- 5) No. of pins: 14, 26
- 6) Mating type  
S: Receptacle
- 7) Board-thickness  
T2: SMT type (Board thickness 1.2mm)  
T6: SMT type (Board thickness 1.6mm)

### Material Treatment

Item	Material	Remarks
Receptacle case	Steel	Nickel plating
Insulators	PPS	Natural
Female terminal	Copper alloy	Selective gold plating

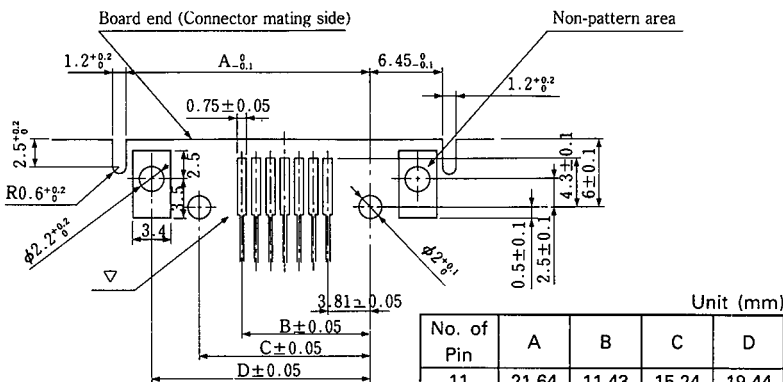
### 4.1 Receptacle SMT Type



CL230-5125-1  
DX10MS-14ST2

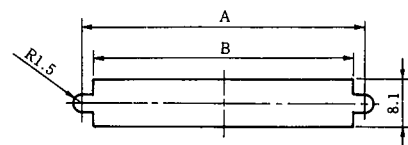
HRS No.	No. of Pin	Parts No.	A	B	C	D	E	F	G	Unit (mm)
CL230-5125-1	14	DX10MS-14ST2	23.64	17.14	30.14	7.62	23.64	15.24	1.35	

### PCB Layout



No. of Pin	A	B	C	D	Unit (mm)
11	21.64	11.43	15.24	19.44	
26	29.31	19.05	22.86	27.06	

### Panel fitting dimensional drawing (Recommended panel thickness: max. 2mm)



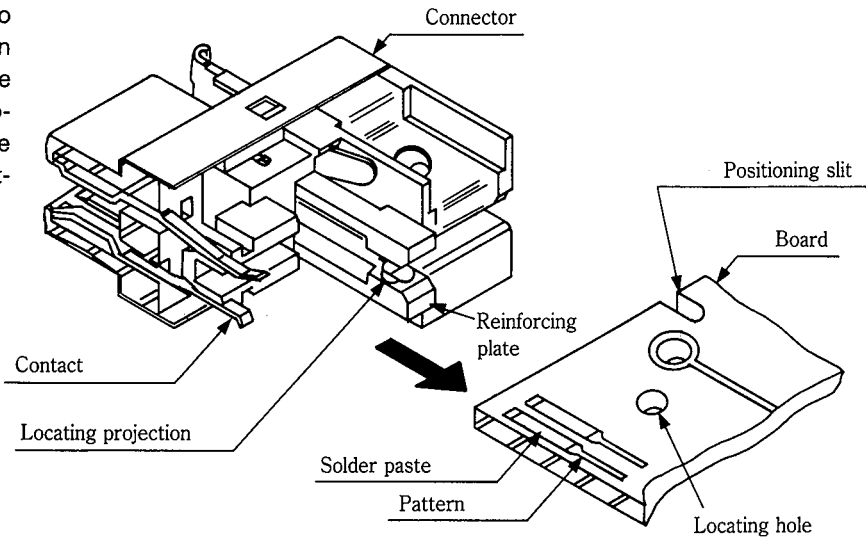
No. of Pin	A	B	Unit (mm)
14	23.64	19.99	
26	31.26	27.60	



## DXM SMT MOUNTING FUNCTIONAL DRAWING

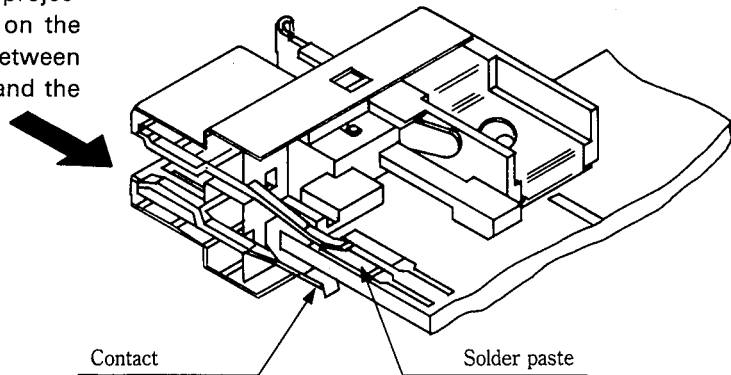
1

Insert the connector to the board and push in the reinforcing plate until the locating projection on the plate stops against the locating hole on the board.



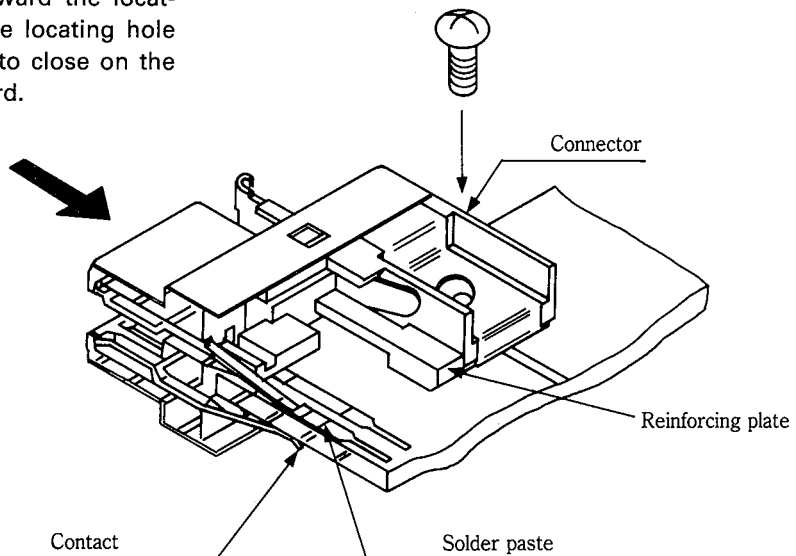
2

At the stage when the locating projection of the reinforcing plate is on the board, there is a gap formed between the cream solder on the board and the contact.



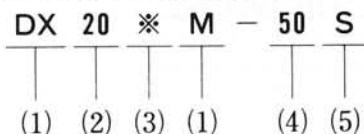
3

By further pressing forward the locating projection enters the locating hole and allows the contact to close on the solder paste on the board.



## 5. One Touch Lock, Receptacle Straight Type

### Ordering Information



- 1) Series No.: DX--M
- 2) Connector style  
20: Straight dip
- 3) Lock style  
Blank: One touch lock type

4) No. of pins: 14, 20, 26, 36, 50, 68

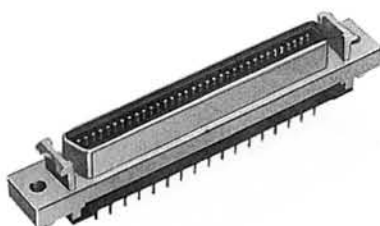
5) Mating type

S: Receptacle

### Material Treatment

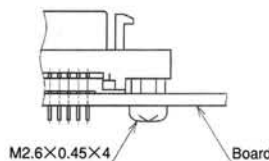
Item	Material	Remarks
Receptacle case	Zinc alloy die cast	Nickel plating
Shell	Steel	Nickel plating
Insulators	PBT resin	Black(UL94V-0)
Female terminal	Copper alloy	Selective gold plating

### 5.1 Receptacle Straight Type

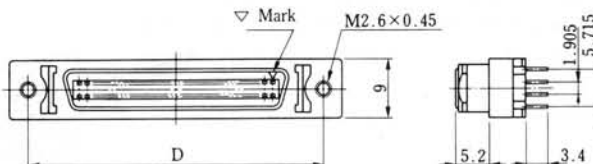
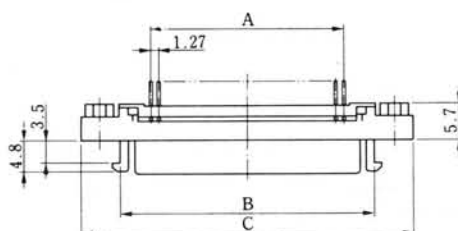


CL230-5017-9  
DX20M-68S

◆ Connector mounting condition



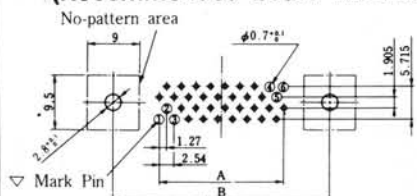
Note: Recommended screw  
tightening torque: 0.3 to 0.4N·m



HRS No.	No. of Pin	Parts No.	A	B	C	D
CL230-5012-5	14	DX20M-14S	7.62	17.14	29.54	23.64
CL230-5013-8	20	DX20M-20S	11.43	20.95	33.35	27.45
CL230-5014-0	26	DX20M-26S	15.24	24.76	37.16	31.26
CL230-5015-3	36	DX20M-36S	21.59	31.11	43.51	37.61
CL230-5016-6	50	DX20M-50S	30.48	40.00	52.40	46.50
CL230-5017-9	68	DX20M-68S	41.91	51.43	63.83	57.93

Unit (mm)

### PCB Layout (Recommended board thickness: 1.6mm)

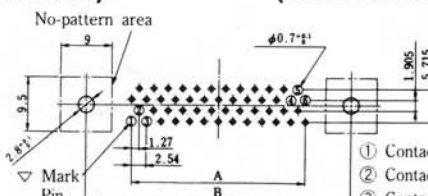


(20, 36, 68 pins)

No. of Pin	A	B
20	11.43	27.45
36	21.59	37.61
68	41.91	57.93

- ① Contact No.1
  - ② Contact No.2
  - ③ Contact No.3
  - ④ Contact No.(N-2)
  - ⑤ Contact No.(N-1)
  - ⑥ Contact No.(N)
- ※N: Numbers of Pin

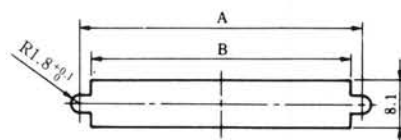
### Panel-Fitting Dimensional Drawing (Recommended panel thickness: max: 2mm)



(14, 26, 50 pins)

No. of Pin	A	B
14	7.62	23.46
26	15.24	31.26
50	30.48	46.50

- ① Contact No.1
  - ② Contact No.2
  - ③ Contact No.3
  - ④ Contact No.(N-2)
  - ⑤ Contact No.(N-1)
  - ⑥ Contact No.(N)
- ※N: Numbers of Pin

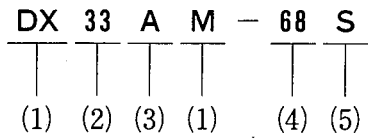


No. of Pin	A	B
14	23.46	19.99
20	27.45	23.8
26	31.26	27.6
36	37.61	33.9
50	46.50	42.8
68	57.93	54.23

Unit (mm)

## 6. One Touch Lock Receptacle Flat Ribbon Cable Type

### Ordering Information



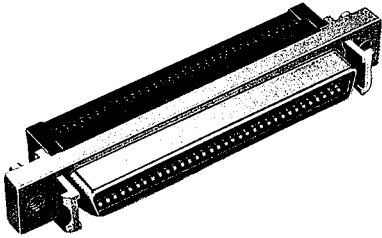
- 1) Series No.: DX--M
- 2) Connector style  
33: Flat IDC type  
(for ribbon cable use)
- 3) Applicable cable  
A: AWG #28

- 4) No. of pins: 36, 50, 68
- 5) Mating type  
S: Receptacle

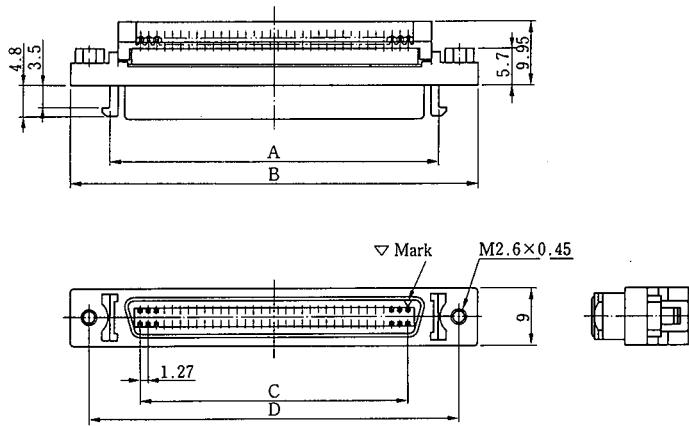
### Material Treatment

Item	Material	Remarks
Receptacle case	Zinc alloy die cast	Nickel plating
Shell	Steel	Nickel plating
Insulators	PBT resin	Black (UL94V-0)
Female terminal	Copper alloy	Selective gold plating

### 6.1 Receptacle, Flat Ribbon Cable Type



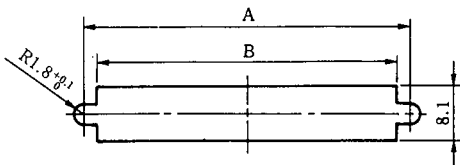
CL230-5062-3  
DX33AM-68S



HRS No.	No. of Pin	Parts No.	A	B	C	D	Unit (mm)
CL230-5095-2	36	DX33AM-36S	31.11	43.51	21.59	37.61	
CL230-5092-4	50	DX33AM-50S	40.00	52.40	30.48	46.50	
CL230-5062-3	68	DX33AM-68S	51.43	63.83	41.91	57.93	

### Panel-Fitting Dimensional Drawing

(Recommended panel thickness: Max. 2mm)



No. of Pin	Unit (mm)	
	A	B
36	37.61	33.90
50	46.50	42.80
68	57.93	54.23

## 7. Screw Lock Type, Plug Cover

### Ordering Information

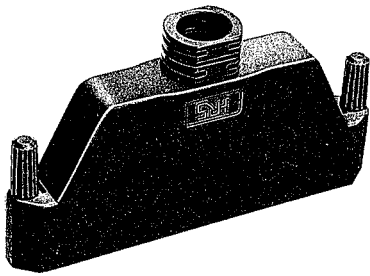
DX30M — 110 — CV1  
 (1)                      (2)                      (3)

- 1) Series No.: DX30M
- 2) No. of pins: 68, 80, 100, 110
- 3) Cover case type  
 CV1: Overmold cover case  
 CV2: Die cast cover

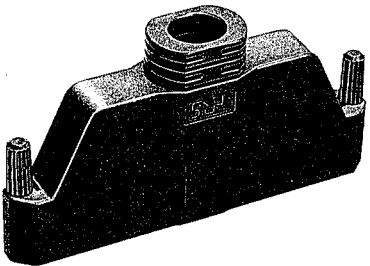
### Material Treatment

Item	Material	Remarks
Overmold cover	Stainless steel, Synthetic resin	Dark grey
Die cast cover	Zinc alloy die cast	Silver coated

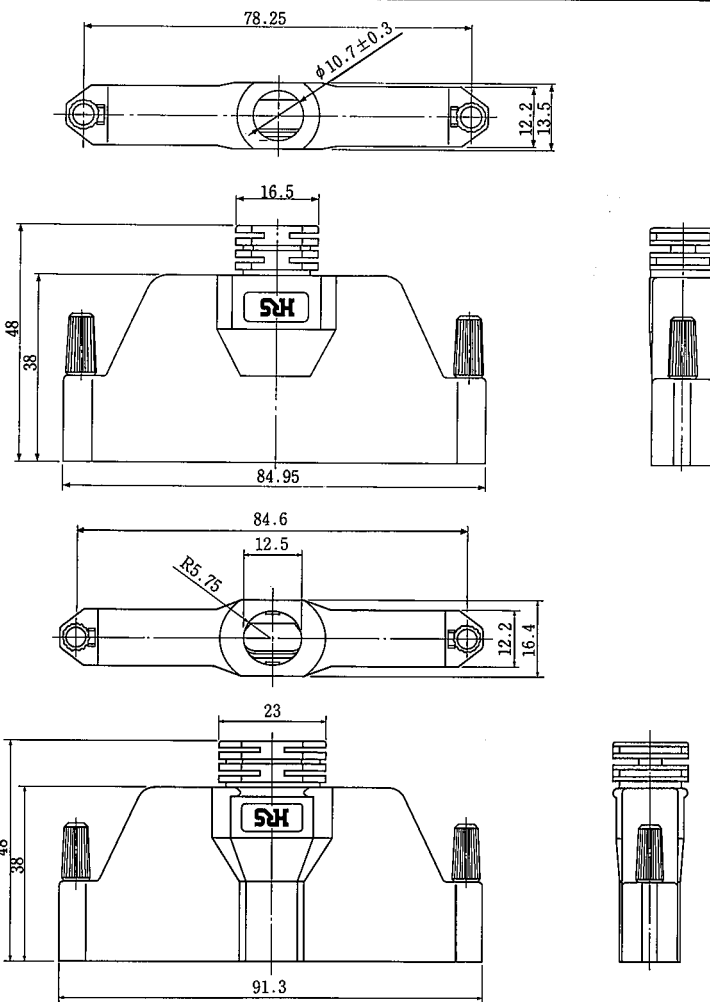
### 7.1 Overmold Cover



CL230-5093-7  
DX30M-100-CV1



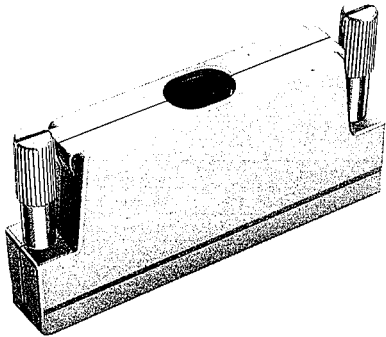
CL230-5083-3  
DX30M-110-CV1



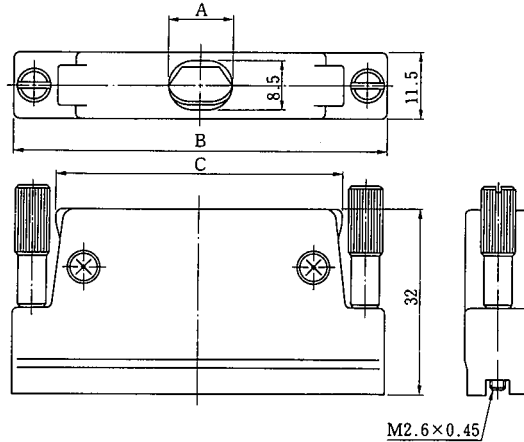
### List of Engagement Combinations

Cover case and plug unit	Receptacle			
	Right angle type	SMT type	Straight type	Ferrite core type
DX30M-100-CV1+DX30AM-100P	DX10AM-100SE2, DX10AM-100SE1	DX10AMS-100ST6	—	DX10AMF-100SE1
DX30M-110-CV1+DX30AM-110P	DX10AM-110SE2, DX10AM-110SE1	—	—	—

## 7.2 Die Cast Cover



CL230-5059-9  
DX30M-68-CV2



Unit (mm)

HRS No.	No. of pin	Parts No.	A	B	C	Applicable plug unit	
						IDC type	Solder type
CL230-5059-9	68	DX30M-68-CV2	11.00	64.93	49.68	DX30AM-68P	—
CL230-5060-8	80	DX30M-80-CV2	12.50	72.55	57.30	DX30AM-80P	—
CL230-5061-0	100	DX30M-100-CV2	14.00	85.25	70.00	DX30AM-100P	DX40M-100P

## List of Engagement Combinations

Cover case and plug unit	Receptacle		
	Right angle type	Straight DIP type	Ribbon cable type
DX30M- 68-CV2+DX30AM- 68P	DX10BM-68S, DX10BM-68SE	DX20BM- 68S	DX33M-68S-LNA
DX30M- 80-CV2+DX30AM- 80P	DX10BM-80S, DX10BM-80SE	DX20BM- 80S	—
DX30M-100-CV2+DX30AM-100P	DX10BM-100S, DX10BM-100SE	DX20BM-100S	—

## 8. Screw Lock, Receptacle Right Angle Type

### Ordering Information

DX 10 B M — 68 S E  
 (1) (2) (3) (1) (4) (5) (6)

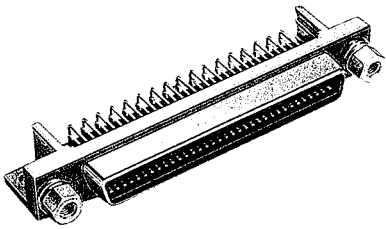
- 1) Series No.: DX--M
- 2) Connector style 10: Right angle type
- 3) Lock style (Screw lock type)
  - A: Receptacle case material — Steel
  - B: Receptacle case material — Zinc alloy die cast
- 4) No. of pins: 68, 80, 100, 110

- 5) Mating type S: Receptacle
- 6) Board fitting type
  - Blank : Screw on type
  - E : Lock pin round type
  - E1 : Lock pin harpoon type (Board thickness 1.6mm)
  - E2 : Lock pin harpoon type (Board thickness 1.2mm)

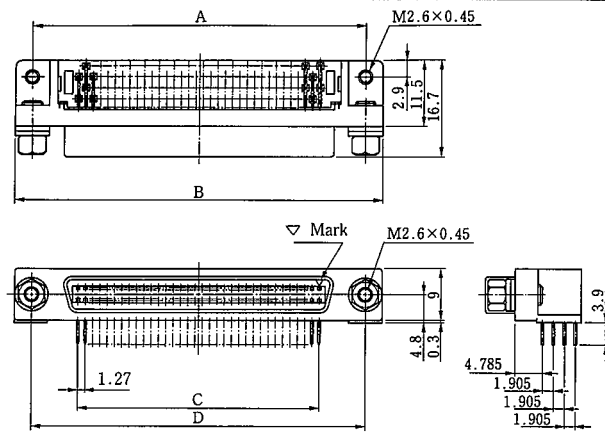
### Material Treatment

Item	Material	Remarks
Receptacle case	Zinc alloy die cast or steel	Nickel plating
Shell	Steel	Nickel plating
Insulator	PBT resin	Black (UL94V-0)
Female terminal	Copper alloy	Selective gold plating

### 8.1 Board Screw on Type

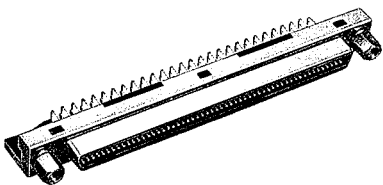


CL230-5008-8  
DX10BM-68S

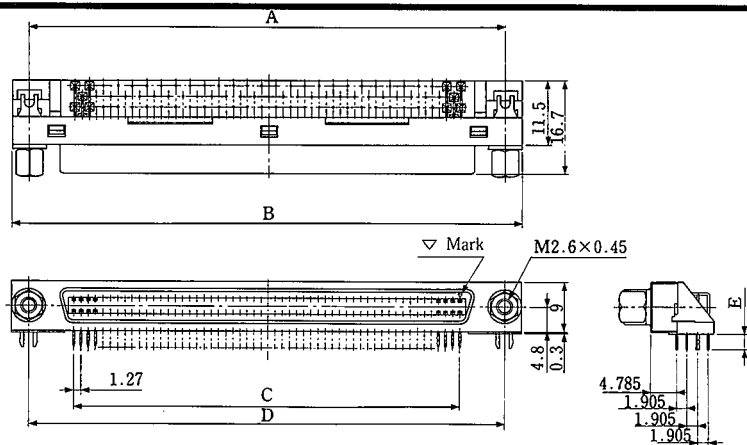
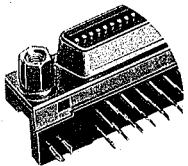


HRS No.	No. of Pin	Parts No.	A	B	C	D	Unit (mm)
CL230-5008-8	68	DX10BM-68S	57.93	63.83	41.91	57.93	
CL230-5009-0	80	DX10BM-80S	65.55	71.45	49.53	65.55	
CL230-5010-0	100	DX10BM-100S	78.25	84.15	62.23	78.25	

### 8.2 Board Lock Pin Harpoon Type

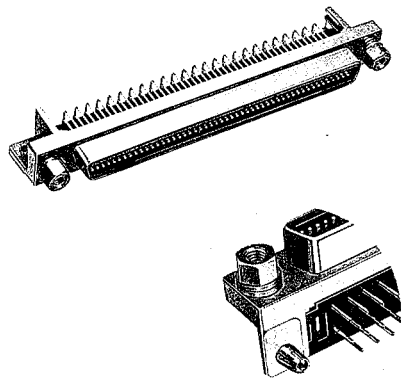


CL230-5138-3  
DX10AM-110SE2

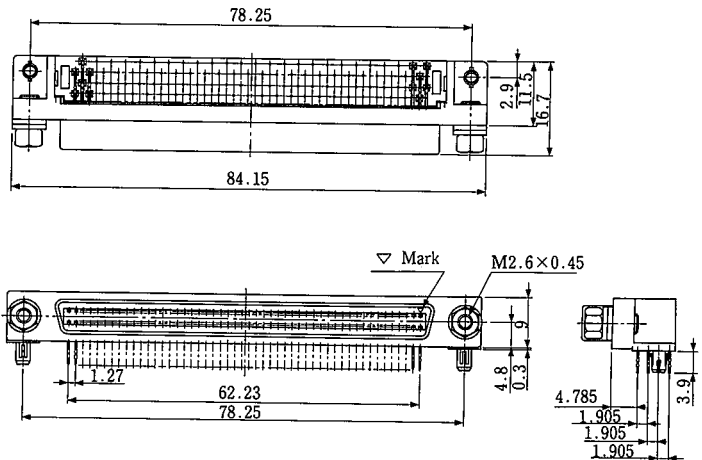


HRS No.	No. of Pin	Parts No.	A	B	C	D	E	Unit (mm)
CL230-5137-0	100	DX10AM-100SE2	78.25	84.15	62.23	78.25	2.7	
CL230-5089-0	100	DX10AM-100SE1	78.25	84.15	62.23	78.25	3.4	
CL230-5138-3	110	DX10AM-110SE2	84.50	90.50	68.58	84.50	2.7	
CL230-5088-7	110	DX10AM-110SE1	84.50	90.50	68.58	84.50	3.4	

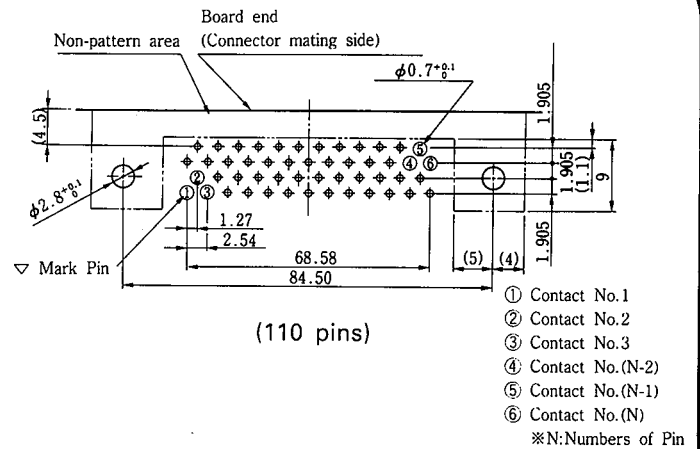
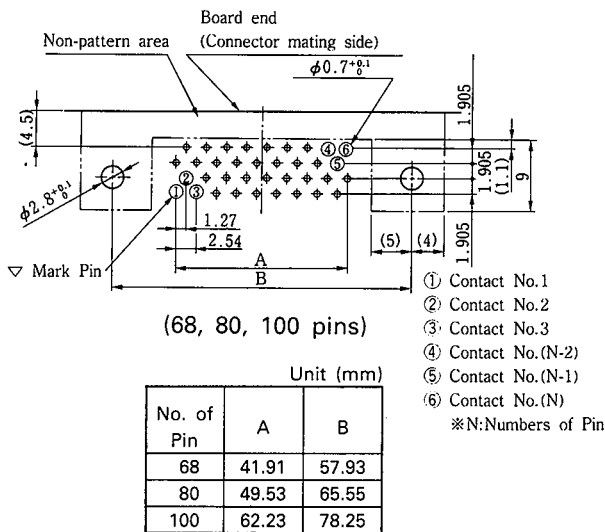
### 8.3 Board Lock Pin, Round Type



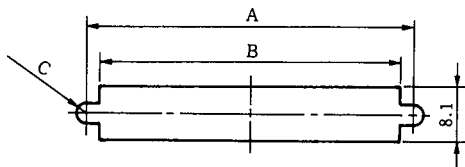
CL230-5076-8  
DX10BM-100SE



### PCB Layout (Recommended Board Thickness: 1.2mm, 1.6mm)



### Panel-Fitting Dimensional Drawing



● DX10BM

Panel thickness	No. of washers
0~t0.4	2
t0.8~1.2	1
t1.6~2	No washer

● DX10AM

Panel thickness
t0.8~1.2

Unit (mm)				
No. of Pin	A	B	C	Remarks
68	57.93	54.23	R1.85	DX10BM-68S
80	65.55	61.85	R1.85	DX10BM-80S
100	78.25	74.55	R1.85	DX10BM-100SE
100	78.25	74.55	R1.5	DX10AM-100SE2 DX10BM-100SE1
110	84.5	80.8	R1.5	DX10AM-110SE2 DX10AM-110SE1

## 9. Screw Lock, Receptacle Ferrite Core Type

### Ordering Information

DX 10 A M F - 100 S E1

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

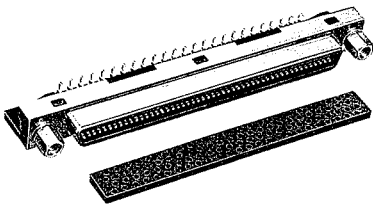
- 1) Series No.: DX--M
- 2) Connector style  
10: Right angle type
- 3) Lock style (Screw lock type)  
A: Receptacle case material-steel
- 4) Board mounting style  
F: Ferrite core type

- 5) No. of pins: 100
- 6) Mating type  
S: Receptacle
- 7) Board fitting type  
E1: Lock pin type (Board thickness 1.6mm)

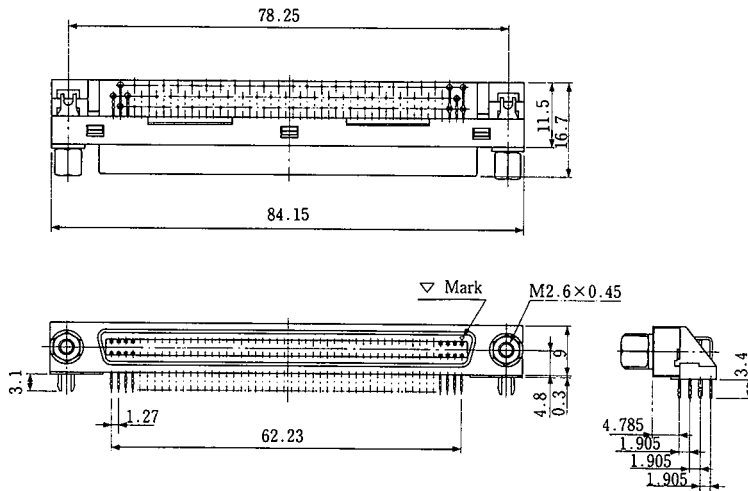
### Material Treatment

Item	Material	Remarks
Receptacle case	Steel	Nickel plating
Insulator	PBT resin	Black (UL94V-0)
Female terminal	Copper alloy	Selective gold plating
Ferrite core	—	—

### 9.1 Right Angle Ferrite Core Type

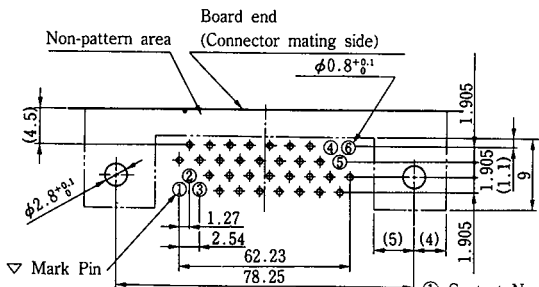


CL230-5127-7  
DX10AMF-100SE1



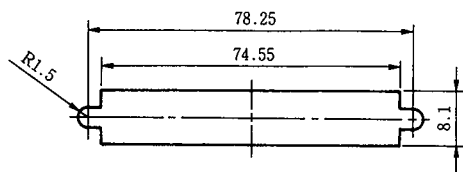
### PCB Layout

(Recommended Board Thickness: 1.6mm)



- ① Contact No.1
  - ② Contact No.2
  - ③ Contact No.3
  - ④ Contact No.(N-2)
  - ⑤ Contact No.(N-1)
  - ⑥ Contact No.(N)
- ※N: Numbers of Pin

### Panel-Fitting Dimensional Drawing



● DX10AMF

Panel thickness
t0.8~1.2



## 10. Screw Lock Receptacle SMT Type

### Ordering Information

DX 10 A M S - 100 S T6

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

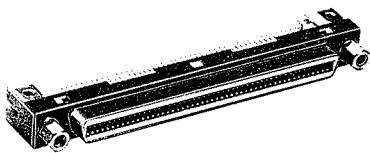
- 1) Series No.: DX--M
- 2) Connector style  
10: Right angle type
- 3) Lock style  
A: Receptacle case material, Steel
- 4) Board mounting style  
S: SMT type

- 5) No. of pins: 100
- 6) Mating type  
S: Receptacle
- 7) Board-thickness  
T6: Board thickness 1.6mm

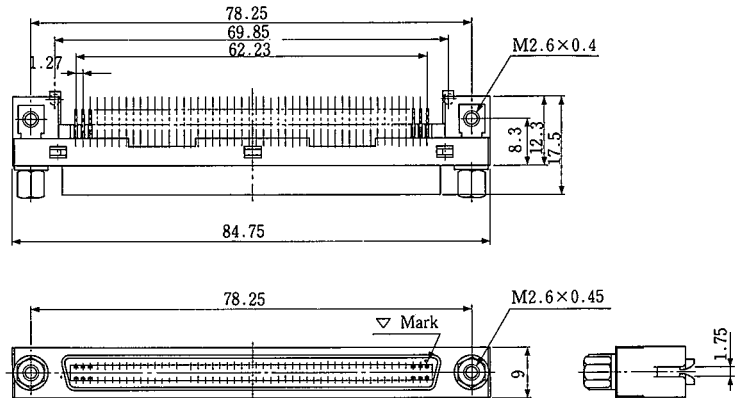
### Material Treatment

Item	Material	Remarks
Receptacle case	Steel	Nickel plating
Insulator	PPS	Natural
Female terminal	Copper alloy	Selective gold plating

### 10.1 Receptacle SMT Type

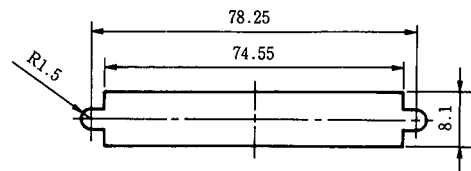
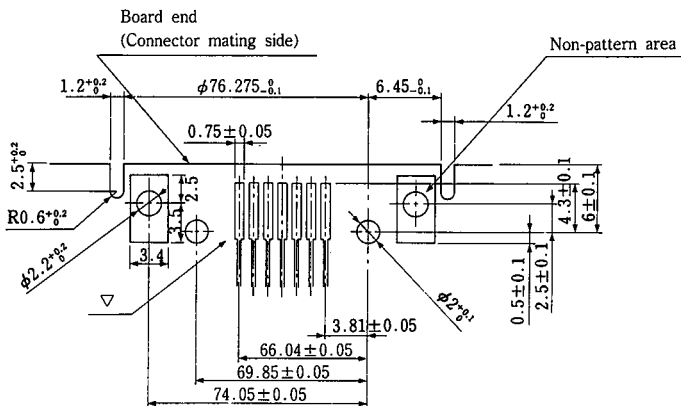


CL230-5126-4  
DX10AMS-100ST6



### PCB Layout

### Panel-Fitting Dimensional Drawing

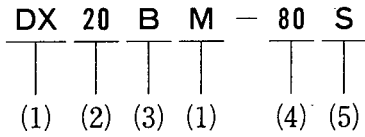


● DX10AMS

Panel thickness
t0.8~1.2

## 11. Screw Lock Receptacle Straight Type

### Ordering Information



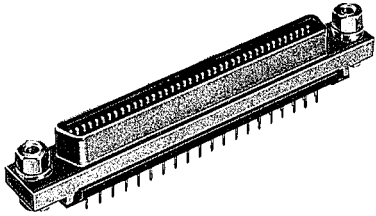
- 1) Series No.: DX--M
- 2) Connector style  
20: Straight dip
- 3) Lock style  
B: Screw lock type

- 4) No. of pins: 68, 80, 100
- 5) Mating type  
S: Receptacle

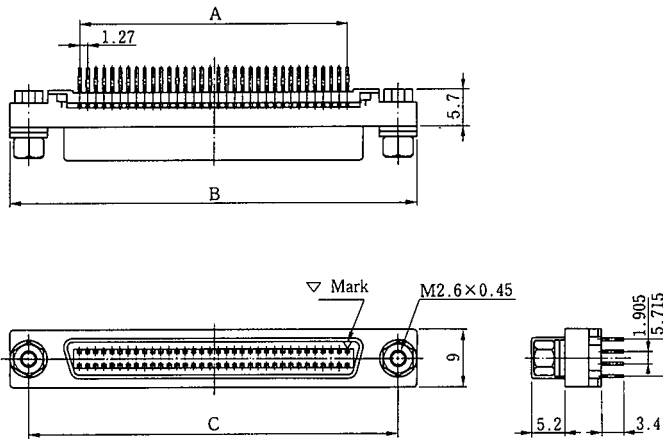
### Material Treatment

Item	Material	Remarks
Receptacle case	Zinc alloy die cast	Nickel plating
Shell	Steel	Nickel plating
Insulator	PBT resin	Black (UL94V-0)
Female terminal	Copper alloy	Selective gold plating

### 11.1 Receptacle Straight Type



CL230-5021-6  
DX20BM-80S



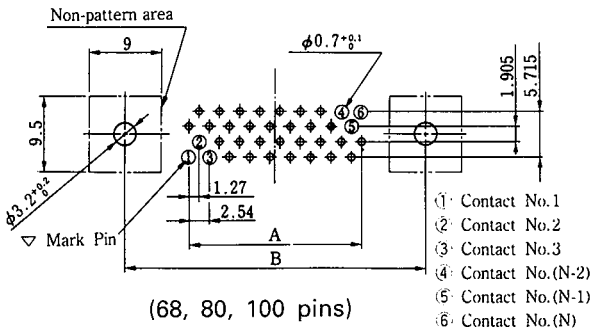
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C
CL230-5020-3	68	DX20BM-68S	41.91	63.83	57.93
CL230-5021-6	80	DX20BM-80S	49.53	71.45	65.55
CL230-5022-9	100	DX20BM-100S	62.23	84.15	78.25

### PCB Layout

(Recommended Board Thickness: 1.6mm)

### Panel-Fitting Dimensional Drawing



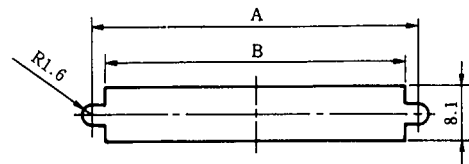
(68, 80, 100 pins)

Unit (mm)		
No. of Pin	A	B
68	41.91	57.93
80	49.53	65.55
100	62.23	78.25

- ① Contact No.1
  - ② Contact No.2
  - ③ Contact No.3
  - ④ Contact No.(N-2)
  - ⑤ Contact No.(N-1)
  - ⑥ Contact No.(N)
- ※N: Numbers of Pin

#### ●DX20BM

Panel thickness	No. of washers
0~t0.4	2
t0.8~1.2	1
t1.6~2	No washer



Unit (mm)

No. of Pin	A	B
68	57.93	54.23
80	65.55	61.85
100	78.25	74.55

## 12. Screw Lock Receptacle, Flat Ribbon Cable Type

### Ordering Information

DX 33 A M - 68 S LNA  
 (1) (2) (3) (1) (4) (5) (6)

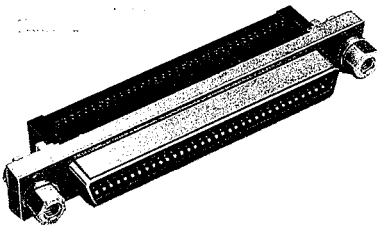
- 1) Series No.: DX--M
- 2) Connector style  
33: Flat IDC type (for ribbon cable)
- 3) Applicable wire  
A: AWG #28
- 4) No. of pins: 68

- 5) Mating type  
S: Receptacle
- 6) Board fitting type  
LNA: Screw lock type

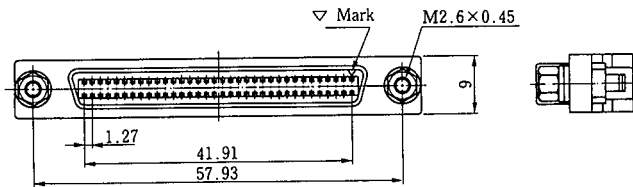
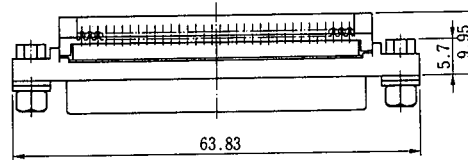
### Material Treatment

Item	Material	Remarks
Receptacle case	Zinc alloy die cast	Nickel plating
Shell	Steel	Nickel plating
Insulator	PBT resin	Black (UL94V-0)
Female terminal	Copper alloy	Selective gold plating

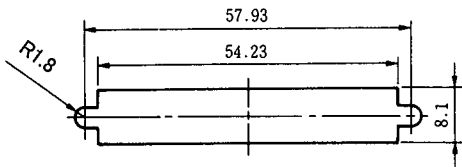
### 12.1 Receptacle, Flat Ribbon Cable Type



CL230-5078-3  
DX33AM-68S-LNA



### Panel-Fitting Dimensional Drawing



#### ● DX33AM

Panel thickness	No. of washers
0~t0.4	2
t0.8~1.2	1
t1.6~2	No washer

## 13. Plug Straight Type

### Ordering Information

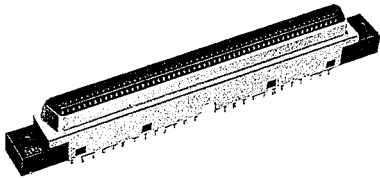
DX 20E M - 110 P  
 (1) (2) (1) (3) (4)

- 1) Series No.: DX--M                      3) No. of pins: 110  
 2) Connector style                      4) Mating type  
 20E: Straight dip                      P: Plug

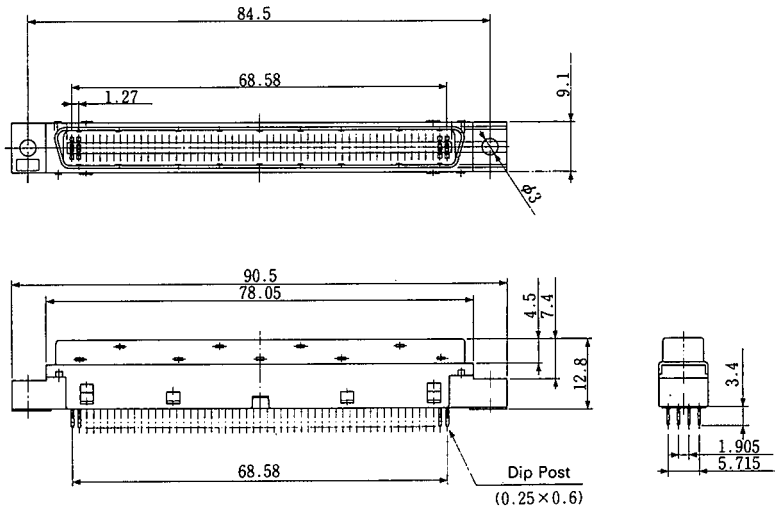
### Material Treatment

Item	Material	Remarks
Shell	Steel	Nickel plating
Insulator	PBT resin	Black (UL94V-0)
Male contact	Copper alloy	Selective gold plating

### 13.1 Plug Straight Type

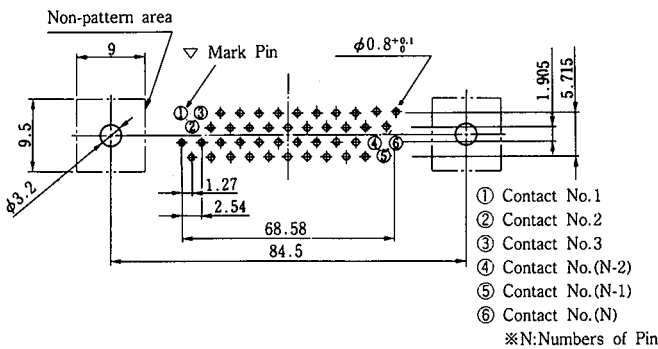


CL230-5094-0  
 DX20EM-110P



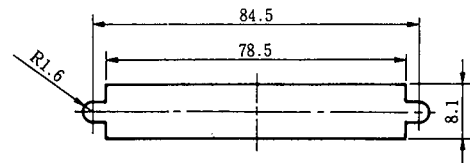
### PCB Layout

(Recommended Board Thickness: 1.5mm)



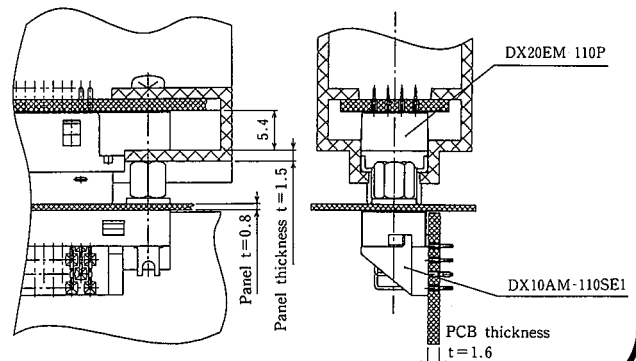
### Panel-Fitting Dimensional Drawing

(Recommended Panel Thickness: Max.1.5mm)



### Diagram of Mounting Conditions for DX20EM

Note: Secure the connectors and boards of this product to the panel.



### List of Engagement Combinations

Plug straight type	Receptacle right angle type
DX20EM-110P	DX10AM-110SE1 or DX10AM-110SE2

## 14. SCSI-compatible Terminator

### Ordering Information

DX70M
— 50
P (TB)
— CV
※

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

- 1) Series No.: DX70M
- 2) No. of contacts : 50
- 3) Type of opening: P : Plug
- 4) Type of circuit  
 TB : Single end (Alternative 2)  
 TC : Sink current resistant type  
 Single end (Alternative 2) type (Note 1)
- 5) Type of plug case  
 CV : Over mold plug case
- 6) Logo mark for plug case (Note 2)  
 No mark : No logo provided  
 A : Logo provided (active term)

### Material/Finish

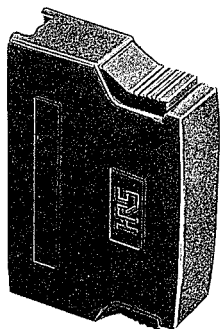
Item	Material	Remarks
Shell	Steel	Nickel plated
Male contact	Copper alloy	Part gold plated
Insulation	Synthetic resin	Plug case, button: Light beige
		Plug unit: Black (UL94V-0)

### Characteristics

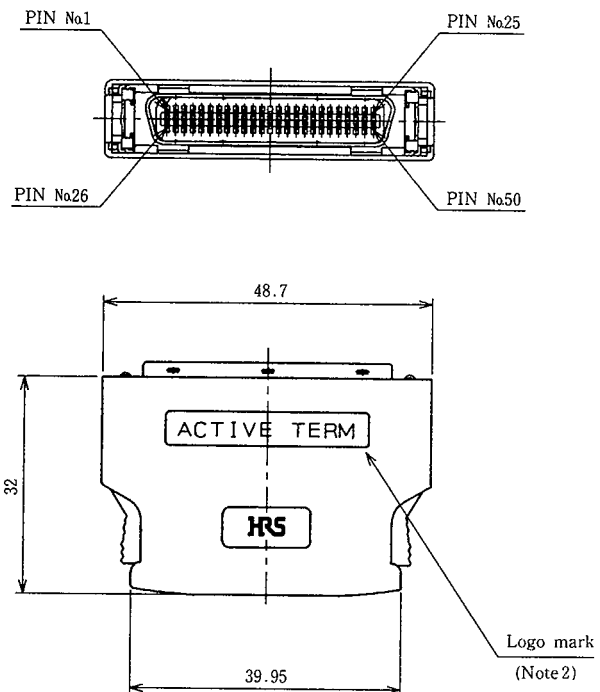
Item	Characteristics
Operating voltage	DC 4.25-5.25 V
Operating temperature range	0°C~+50°C

Note 1: Resistant to a sink current of up to 150 mA

### 14.1 Terminator

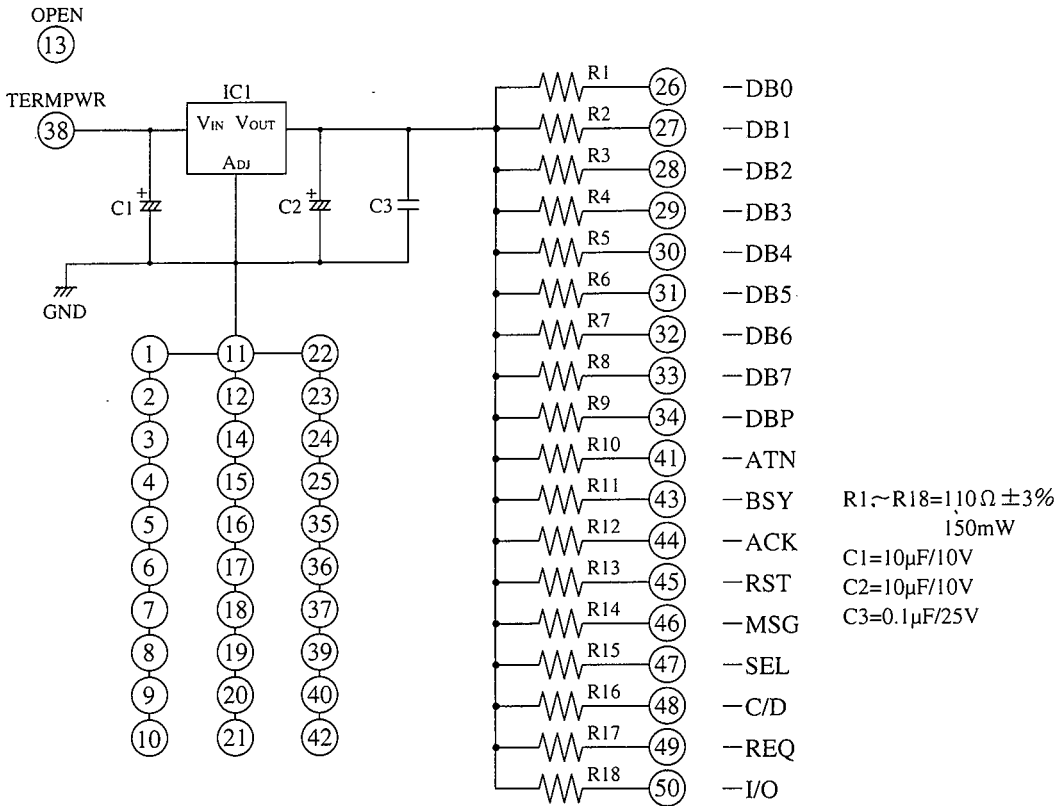


CL230-5195-7  
DX70M-50P(TB)-CV

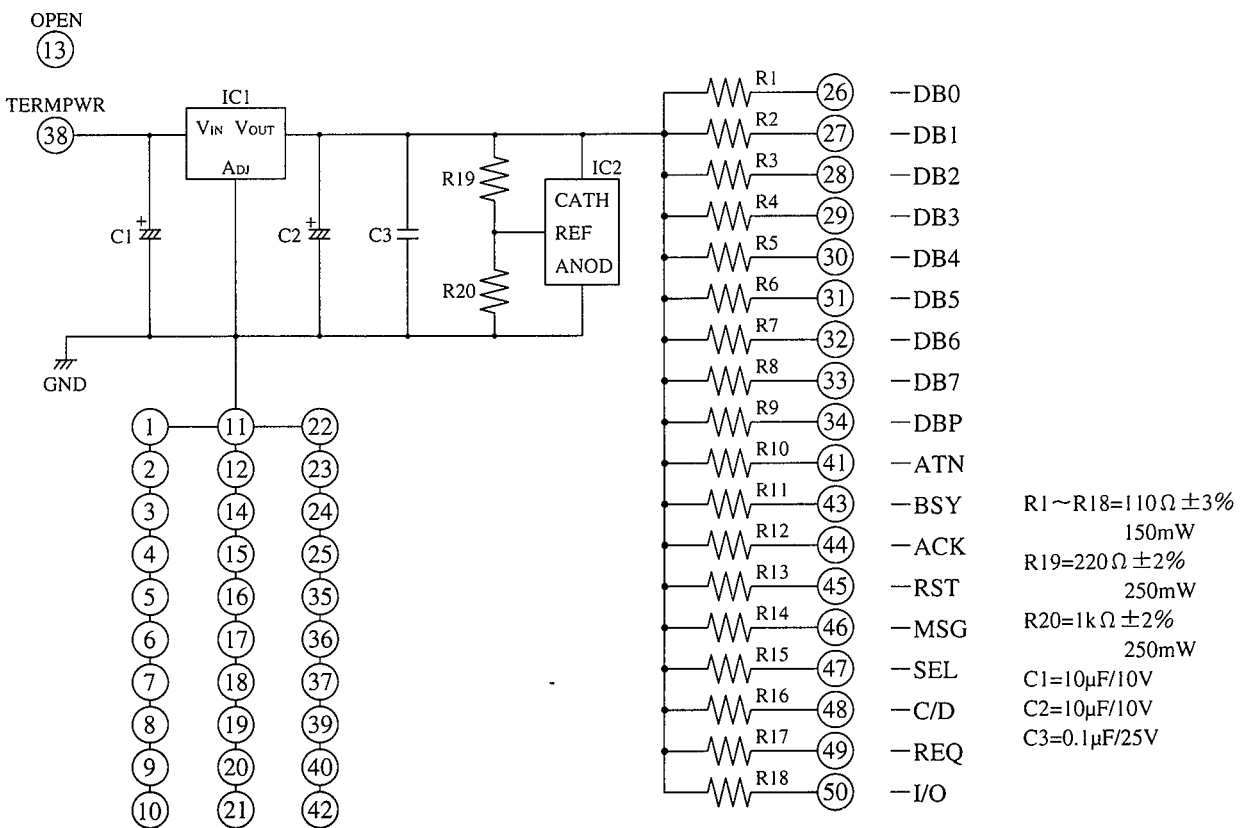


## Circuit Diagram

### Single end (Alternative 2) Type

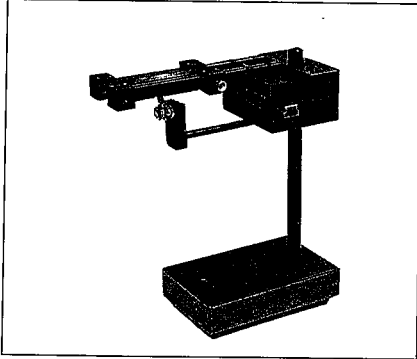


### Sink-Current-Resistant Single end (Alternative) Type

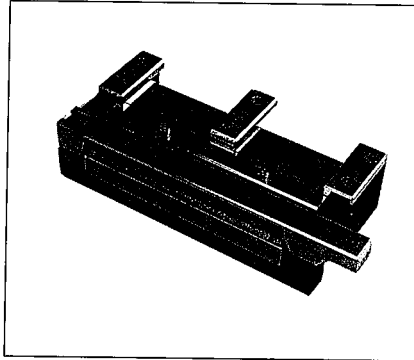


## Connecting Method (Discrete Cable IDC Type)

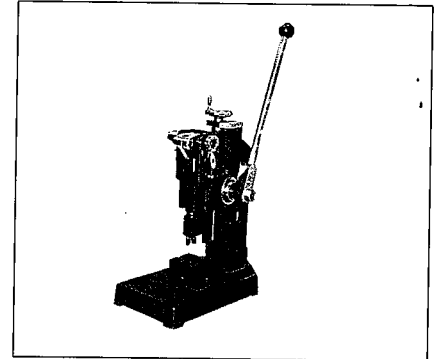
### • Connecting Tools



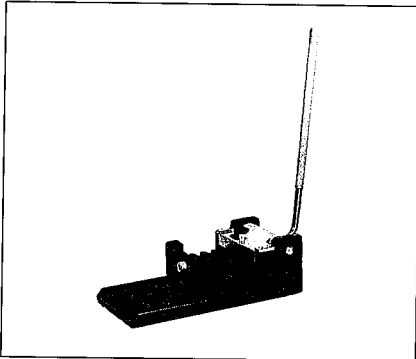
Cable distribution jig



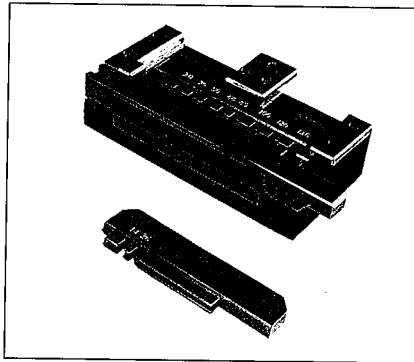
Cable shearing unit



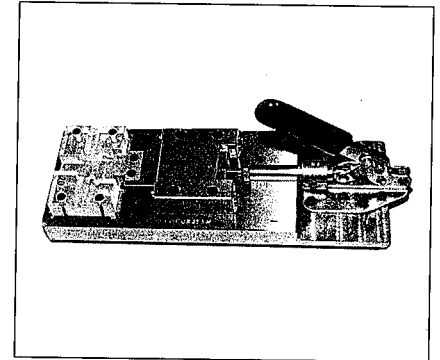
Shield case fixing jig



IDC press



IDC guide plate unit



Hood insertion jig

### List of Connecting Jigs and Accessories Plug Connector

Cable	Connector Name	Process												
		Cable Distribution	Remaining part cutting		Crimping		Shield case fixing	Hood insertion						
			Press	Unit	Press	Remaining Part cutting								
I/O Cable (Discrete wire)	DX30AM-14P	By hand						Order attachments separately ※1	Order attachments separately ※2					
	DX30AM-20P							DX30AM-CAT1	DX30AM-HP1	DX30AM-CU1	DX30AM-HP1	DX30AM-GPT1	DX30AM-CCT1	DX30AM-HPT1
	DX30AM-26P							CL902-2090-0						
	DX30AM-36P	Semi-Auto machine	CL902-0210-0	CL902-0211-2	CL902-0210-0	CL902-0214-0	CL902-0213-8	CL902-0216-6						
	DX30AM-50P	SA200/DX30AM												
	DX30AM-68P	CL903-0002-9	Automatic machine											
	DX30AM-80P	AM200/DX30												
	DX30AM-100P	CL903-0030-4												
	DX30AM-110P							Order attachments separately ※3	Order attachments separately ※4					

※1 DX30AM-CCT1(61) CL902-0213-8(61) ※2 DX30AM-HPT1-14 CL902-0217-9 ※4 DX30AM-HPT1-110 CL902-0219-4  
 DX30AM-CCT1(62) CL902-0213-8(62) ※3 DX30AM-HPT1-100 CL902-0218-1

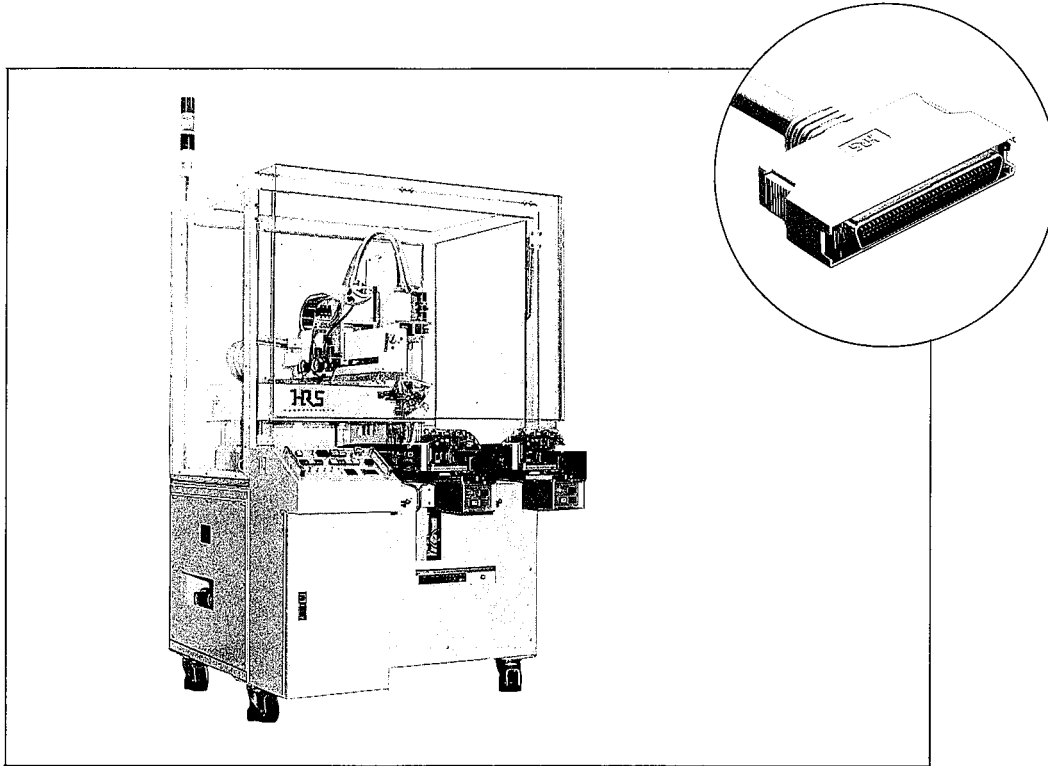
### Receptacle Connector

Cable	Connector Name	Press	Guide plate
Ribbon Cable	DX33AM-68S-LNA	Hi-Flex Connecting press HHP-502 CL550-0082-2	DX33AM-GPA (Comes with pressure block) CL902-0233-5

# FOR DX, DXM SERIES AUTOMATIC DISCRETE CABLE COMBING MACHINE

## General

This Automatic Combing Machine arranges and streamlines the conductor cables of a multiconductor round I/O cable when terminating it to a connector.



## Features

- (1) Cable number identification is provided.
- (2) High speed and highly accurate conductor cable handling mechanism.
- (3) Twin stage design provides highly efficient combing operation.
- (4) Pushbutton operation offers very simple operating procedure.
- (5) Lightweight, quiet operation, and clean working environment.

## Principal Specifications

- |   |   |
|---|---|
| 1. Power supply                           | 200VAC  |
| 2. Pneumatic supply pressure              | 5kgf/cm <sup>2</sup>  |
| 3. Dimensions and weight of the main unit | 1,100mm W × 1,150mm D × 1,720mm H<br>(not including circular indicating lamp)<br>Weight 400kg |
| 4. Cables to be used                      | AWG #28 (0.58mm φ)  |