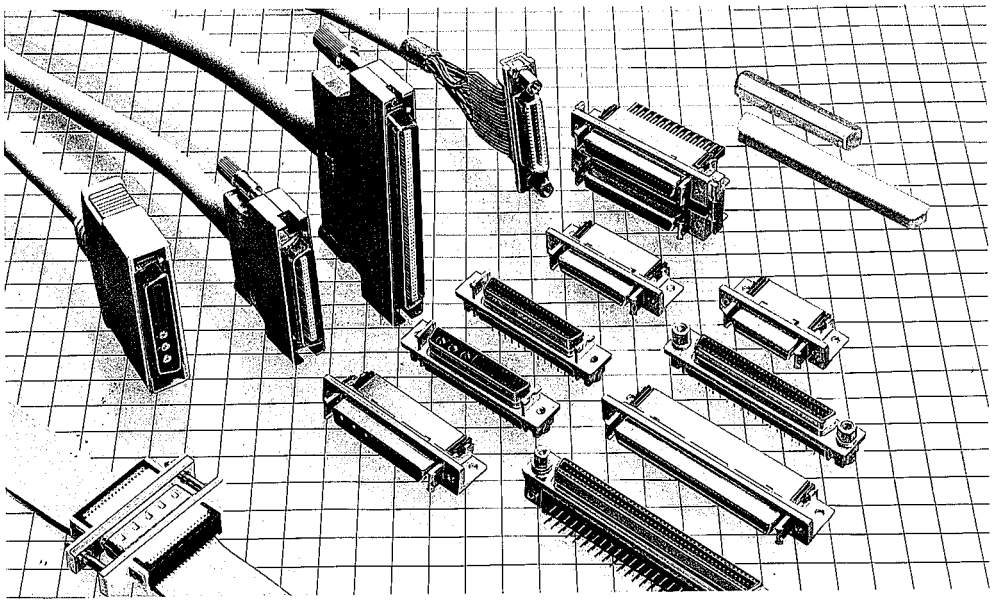
DX SERIES
HIGH-DENSITY I/O CONNECTORS

General

DX series high-density I/O cnnectors with bellow contacts are perfect for tomorrow's miniaturized electronic devices. This new 1.27 mm (0.050″) interconnect design ensures positive locking, effortless coupling, terminal protection and EMI reduction in a miniaturized and rugged package. DX series offers you one of the most varied and complete lines of High-Density connectors in the world, i.e. IDC, Solder and with Co-axial contacts for the plug and right angle dip, straight dip, IDC and with Co-axial contacts for the receptacle. Available in 20, 28, 36,50, 68, 80,100 and 132 way.



Features

1. 1.27 mm (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 & #30 wires.
5. Group IDC termination of 1.27 mm pitch cable and loose piece contacts is possible simply by replacing the protector, allowing you to select a termination system meeting requirements, trial production and mass production, for example.
6. Backshell and receptacle shell are made of die-cast zinc alloy to reduce the penetration of external EMI noise.
7. Easy to use 'One-Touch' and 'Screw' locking mechanisms assure quick and easy 'positive' closures every time.
8. Termination method is available in IDC, Soldering, Right Angle Dip, Straight Dip and SMT.
9. DX with 3 cavities and 2 cavities for Co-axial contacts are newly introduced to meet the needs of high speed data transmission.
10. Shielded Plug-in type for interface between 2 Units available.

Applications

Office Automation, Computers, Communications 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	250MΩ or more at DC100V
Contact resistance	50mΩ or less at DC100mA
Withstanding voltage	AC300Vr.m.s. for 1 minute

Material & Finish

Parts	Materials	Finish
Plug shell	Zinc alloy die-cast	Silver finish
Receptacle shell	Zinc alloy die-cast	Nickel plating
Insulator	PBT resin or equivalent※	Black ※
Pin contact	Copper alloy	Selective gold plating
Socket contact	Copper alloy	Selective gold plating

※UL94V-0
※To identify DX30A, DX31A, DX32A & DX33A for AWG #28, natural color is partially used in the insulator.

Applicable cable

I/O cable (Discrete wire)		
Conductor size	AWG #30	AWG #28
Conductor information	7/0.1	7/0.127
Insulator outer dia.	φ0.5	φ0.58
UL style cables	UL20276 and UL2789	

Ribbon cable (flat & slit)	
Conductor size	AWG #28
Conductor information	19/0.08
Cable thickness	0.9
UL style cables	UL2651, UL2734, UL20012

Ordering Information

- **Receptacle Connector**

DX 10 ※ ※ – 50 S – ※
(1) (2) (3) (5) (6) (7) (8)

- **Plug Connector**

DX 30 A ※ – 50 P – ※
(1) (2) (4) (5) (6) (7) (8)

- **Co-axial Connector**

DX 30 A J – 26 P – CP3
(1) (2) (4) (5) (10) (7) (8)

DX 10 J – 0 SE – CR3 / A
(1) (2) (5) (10) (7) (8) (11)

- **SMT Connector**

DX 10 S – 60 S – SG
(1) (2) (3) (6) (7) (8)

DX 30 A – 60 P – PG
(1) (2) (4) (6) (7) (8)

- **Accessories**

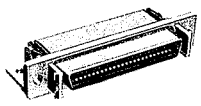
DX – 50 – CV
(1) (6) (9)

(1) Series Number: DX
(2) Connection Type
10 : Right Angle Dip
20 : Straight Dip
30 : IDC for discrete thin wire (AWG #28 and 30)
31 : IDC for discrete wire laminated (AWG #28 and #30)
32 : IDC for slit ribbon cable (AWG #28)
33 : IDC for flat ribbon cable (AWG #28)
(3) Lock Type
Blank : One Touch Lock
A : Screw Lock S : SMT type
(4) Applicable Wire
Blank : AWG #30
A : AWG #28
(5) Variation
Blank : Standard
J : Co-axial contact included
(6) Number of Pins: 20, 28, 36, 50, 60, 68, 80, 100, 132
(7) Types of Opening
P : Plug connector
S : Receptacle connector
SW : Receptacle connector (double layer)
SE : Receptacle connector (Lock Pin)
(8) Variation
Blank : Standard
CR2A : 2 co-axial contacts provided (Receptacle)
CR3 : 3 co-axial contacts provided (Receptacle)
CP3 : 3 co-axial contact holes provided (Plug)
LNA : Screw lock mechanism (Receptacle)
PG : Plug-in (Plug)
SG : Plug-in (Receptacle)
(9) Accessories
CV : Straight cable (One-touch lock type)
CV1 : Straight cable entry case (Screw lock type)
CV3 : Straight cable entry case (Over mode type)
CV4 : Straight cable entry (Symmetry big cable)
DC : Dust cap (Semi-hard, for one-touch lock)
DC1 : Dust cap (Semi-hard, for screw lock)
DC2 : Dust cap (Soft, for screw lock)
(10) No. of signal terminals:
0 : 26
(11) Shell size
No symbol : 50 pins
A : 20 pins

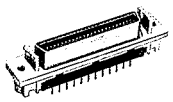
DX Series variations

● One-touch lock I/O connector

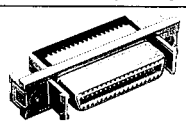
[Receptacle]



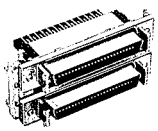
DX10-※※S (Right angle dip)



DX20-※※S (Straight dip)

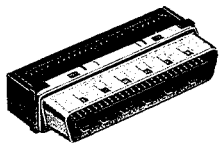


DX30A,31A-※※S
(IDC type for fine wire)
DX32A,33A-※※S
(IDC type for ribbon cable)



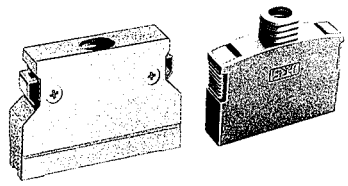
DX10-50SW(50pin double layer type)

[Plug]



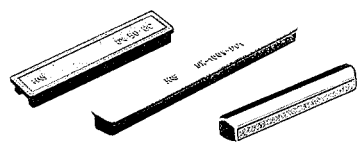
DX30,31-※※P (IDC type)
DX30A,31A-※※P (IDC type)

[Cover]



DX-※※-CV (Die cast cover)
DX-※※-CV3 (Overmold cover)

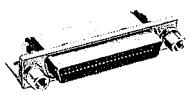
[Dust cap]



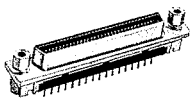
DX-※※-DC
DX-100S-DC1
DX-※※S-DC2

● Screw lock I/O connector

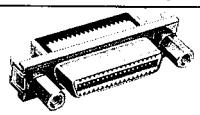
[Receptacle]



DX10A-※※S (Right angle dip)

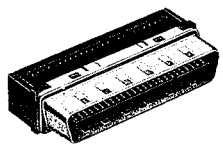


DX20A-※※S (Straight dip)



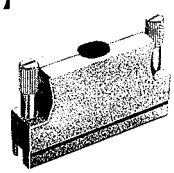
DX30A,31A-※※S-LNA
(IDC type for fine wire)
DX32A,33A-※※S-LNA
(IDC type for ribbon cable)

[Plug]



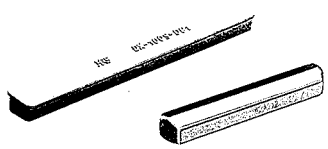
DX30,31-※※P (Press-fit type)
DX30A,31A-※※P (Press-fit type)

[Cover]



DX-※※-CV1 (Die cast cover)

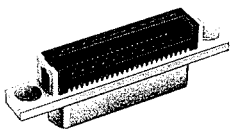
[Dust cap]



DX-100S-DC1
DX-※※S-DC2

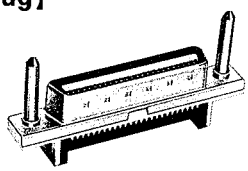
● Plug-in connector

【Receptacle】



DX30A,31A-※※S-SG

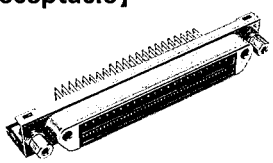
【Plug】



DX30A,31A-※※P-PG

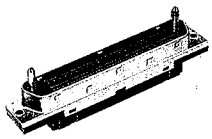
● Multipole (132 pins) Connector

【Receptacle】



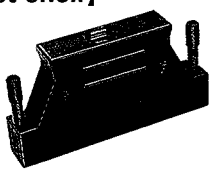
DX10A-132S

【Plug】



DX30A-132P

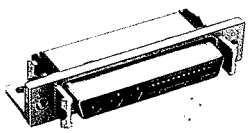
【Diecast shell】



DX-132-CV1

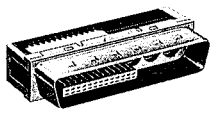
● I/O connector with co-axial contact

【Receptacle】



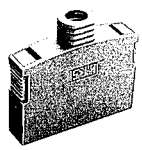
DX10J-26S-CR3 (Right angle dip)
DX20J-26S-CR3 (Straight dip)
DX10J-26S-CR2A

【Plug】



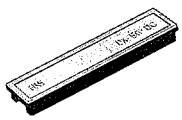
DX30AJ-26P-CP3 (IDC type)

【Over-mold shell】



DX-50-CV3

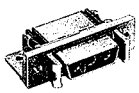
【Dust cap】



DX-50-DC

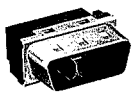
〈Prevention of mis-insertion〉

【Receptacle】



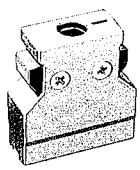
DX10J-0SE-CR3/A
DX10J1-0SE-CR3/A

【Plug】



DXJ-0P-CP3/A
DXJ1-0P-CP3/A

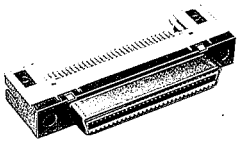
【Diecast shell】



DX-20-CV

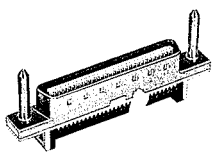
● SMT connector

【Receptacle】



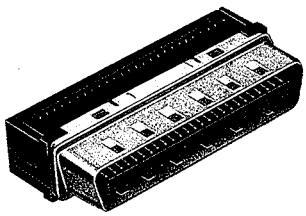
DX10S-60S-SG

【Plug】

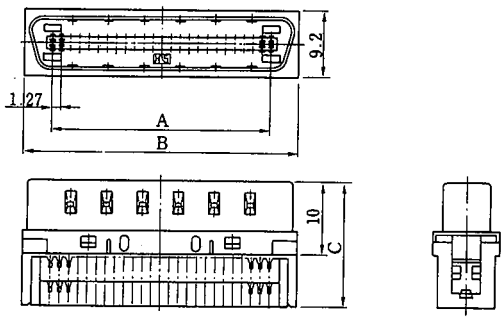


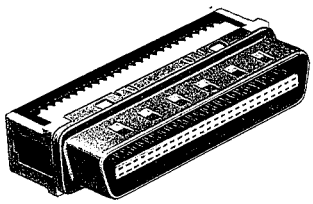
DX30A-60P-PG

1. IDC Plug Connector
1.1 DX30, DX30A-※※P (AWG#28 Discrete Thin Wire)



CL230-0011-5
DX30-50P



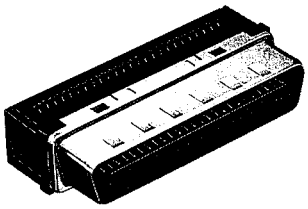


CL230-0025-0
DX30A-50P

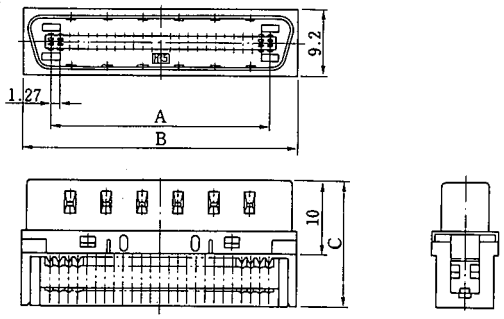
Unit: mm

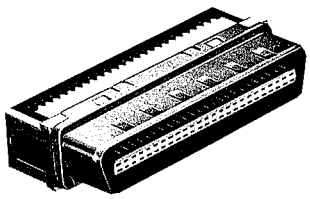
HRS No.	No. of Pin	Part No.	Applicable cable	A	B	C
CL230—0008—0	20	DX30—20P	AWG#30	11.43	19.18	17.2
CL230—0022—1		DX30A—20P	AWG#28			
CL230—0009—3	28	DX30—28P	AWG#30	16.51	24.26	17.2
CL230—0023—4		DX30A—28P	AWG#28			
CL230—0010—2	36	DX30—36P	AWG#30	21.59	29.34	17.2
CL230—0024—7		DX30A—36P	AWG#28			
CL230—0011—5	50	DX30—50P	AWG#30	30.48	38.23	17.2
CL230—0025—0		DX30A—50P	AWG#28			
CL230—0012—8	68	DX30—68P	AWG#30	41.91	49.66	17.2
CL230—0026—2		DX30A—68P	AWG#28			
CL230—0013—0	80	DX30—80P	AWG#30	49.53	57.28	17.2
CL230—0027—5		DX30A—80P	AWG#28			
CL230—0014—3	100	DX30—100P	AWG#30	62.23	69.98	18.2
CL230—0028—8		DX30A—100P	AWG#28			

1.2 IDC Plug Connector DX31. DX31A-※※P (Discrete Wire Laminated)



CL230-0018-4
DX31-50P



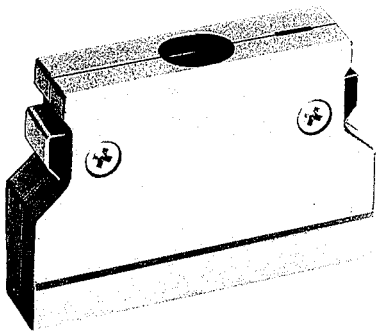


CL230-0032-5
DX31A-50P

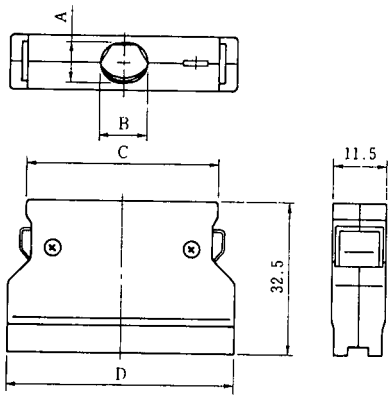
Unit: mm

HRS No.	No. of Pin	Part No.	Applicable cable	A	B	C
CL230—0015—6	20	DX31—20P	AWG#30	11.43	19.18	17.2
CL230—0029—0		DX31A—20P	AWG#28			
CL230—0016—9	28	DX31—28P	AWG#30	16.51	24.26	17.2
CL230—0030—0		DX31A—28P	AWG#28			
CL230—0017—1	36	DX31—36P	AWG#30	21.59	29.34	17.2
CL230—0031—2		DX31A—36P	AWG#28			
CL230—0018—4	50	DX31—50P	AWG#30	30.48	38.23	17.2
CL230—0032—5		DX31A—50P	AWG#28			
CL230—0019—7	68	DX31—68P	AWG#30	41.91	49.66	17.2
CL230—0033—8		DX31A—68P	AWG#28			
CL230—0020—6	80	DX31—80P	AWG#30	49.53	57.28	17.2
CL230—0034—0		DX31A—80P	AWG#28			
CL230—0021—9	100	DX31—100P	AWG#30	62.23	69.98	18.2
CL230—0035—3		DX31A—100P	AWG#28			

2. Shell
2.1 DX-※※-CV (One Touch Lock)



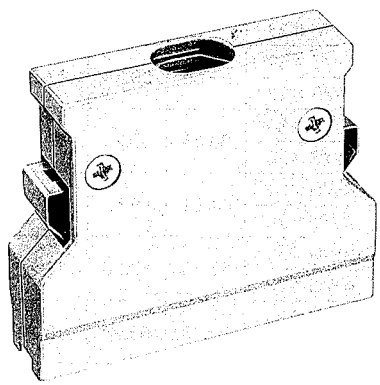
CL230-0039-4
DX-50-CV



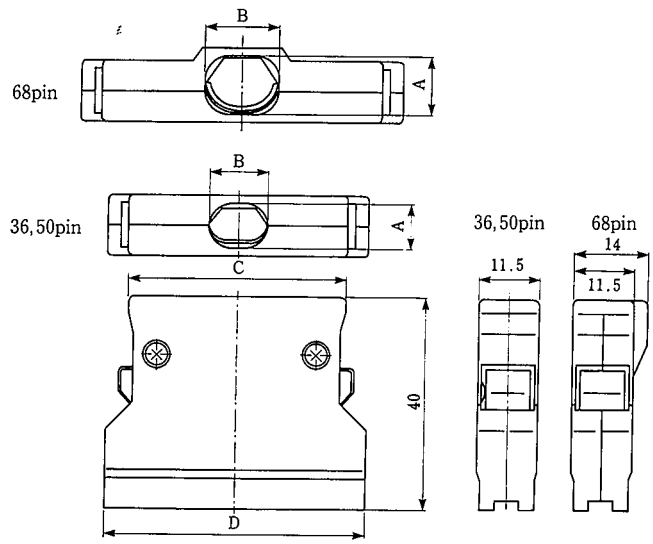
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D
CL230—0036—6	20	DX—20—CV	φ6.7	φ6.7	22.3	30.0
CL230—0037—9	28	DX—28—CV	φ7.5	φ7.5	27.38	35.08
CL230—0038—1	36	DX—36—CV	φ8.7	φ8.7	32.46	40.16
CL230—0039—4	50	DC—50—CV	8.5	10.0	41.35	49.05
CL230—0040—3	68	DX—68—CV	9.2	10.0	52.78	60.48
CL230—0041—6	80	DX—80—CV	8.5	12.5	60.4	68.1

2.2 DX-※※-CV4 (Large Cable, One Touch Lock) Type



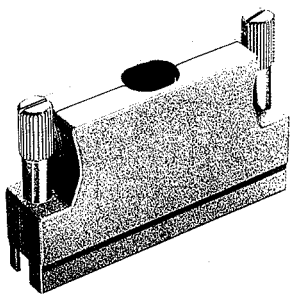
CL230-0227-4
DX-50-CV4



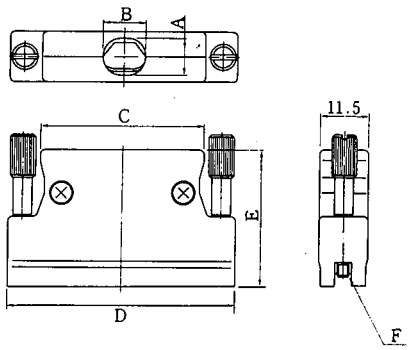
Unit:mm

HRS No.	No. of Pin	Part No.	A	B	C	D
CL230-0226-1	36	DX-36-CV4	8.5	11	32.46	40.16
CL230-0227-4	50	DX-50-CV4	8.5	11	41.35	49.05
CL230-0228-7	68	DX-68-CV4	11.0	14	52.78	60.48

2.3 DX-※※-CV1 (Screw Lock)



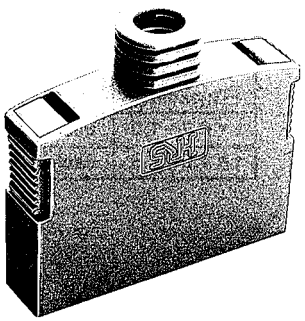
CL230-0058-9
DX-68-CV1



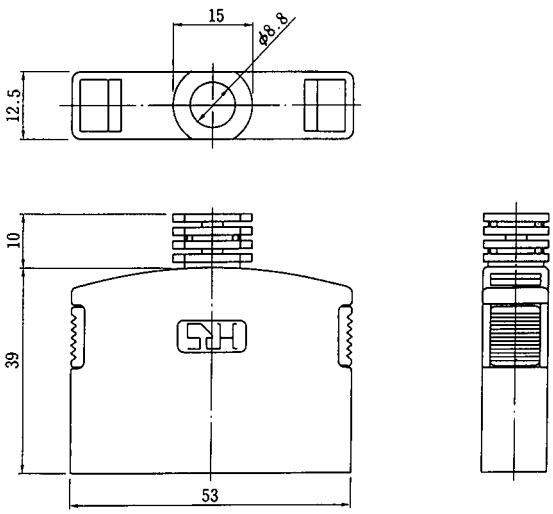
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D	E	F
CL230-0054-8	20	DX-20-CV1	6.0	8.0	19.2	34.2	32	M3 x 0.5
CL230-0055-0	28	DX-28-CV1	6.5	8.5	24.28	39.28	32	M3 x 0.5
CL230-0056-3	36	DX-36-CV1	7.5	9.0	29.36	44.36	32	M3 x 0.5
CL230-0057-6	50	DX-50-CV1	8.5	10.0	38.25	53.25	32	M3 x 0.5
CL230-0058-9	68	DX-68-CV1	8.5	11.0	49.68	64.68	32	M3 x 0.5
CL230-0059-1	80	DX-80-CV1	8.5	12.5	57.3	72.3	32	M3 x 0.5
CL230-0044-4	100	DX-100-CV1	8.5	14.0	60.0	85.0	38.9	M2.6 x 0.45

2.4 DX-※※-CV3 (One Touch Lock, Overmold)



CL230-0147-7
DX-50-CV3

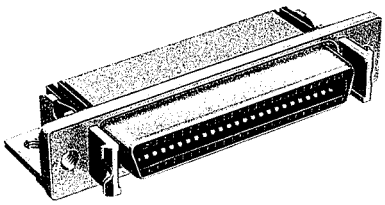


Unit: mm

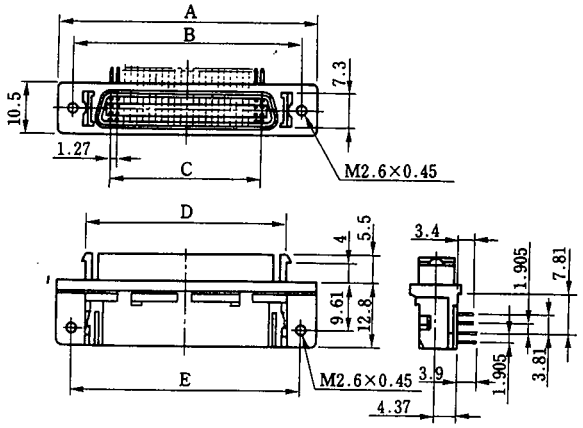
HRS No.	No. of Pin	Part No.	A	B	C
CL230-0147-7	50	DX-50-CV3	8.8	15	53
CL230-0237-8	68	DX-68-CV3	9.6	14.9	64.43

3. Receptacle

3.1 DX10-※※S (Right Angle Dip, One Touch Lock)



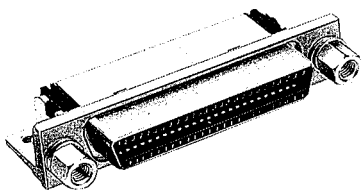
CL230-0004-0
DX10-50S



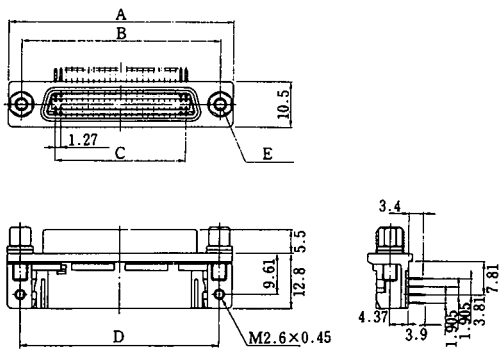
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D	E
CL230—0001—1	20	DX10—20S	33.4	27.4	11.43	21.6	27.4
CL230—0002—4	28	DX10—28S	38.48	32.48	16.51	26.68	32.48
CL230—0003—7	36	DX10—36S	43.56	37.56	21.59	31.76	37.56
CL230—0004—0	50	DX10—50S	52.45	46.45	30.48	40.65	46.45
CL230—0005—2	68	DX10—68S	63.88	57.88	41.91	52.08	57.88
CL230—0006—5	80	DX10—80S	71.5	65.5	49.53	59.7	65.5

3.2 DX10A-※※S (Right Angle Dip, Screw Lock)



CL230-0050-7
DX10A-50S

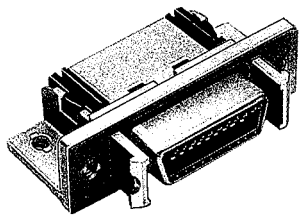


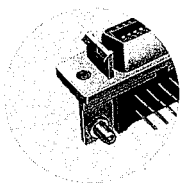
Panel Thickness	No. of Washer
t = 0.7~1.0	Each 2 pieces
t = 1.5~1.8	Each 1 piece

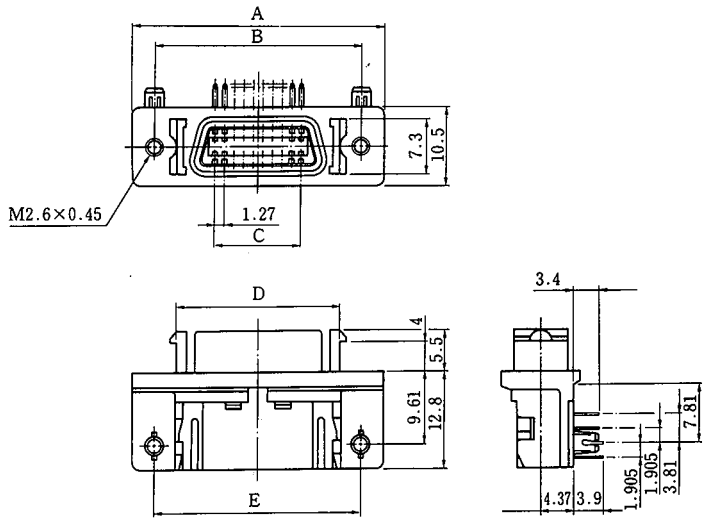
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D	E
CL230—0047—2	20	DX10A—20S	33.4	27.4	11.43	27.4	M3 x 0.5
CL230—0048—5	28	DX10A—28S	38.48	32.48	16.51	32.48	M3 x 0.5
CL230—0049—8	36	DX10A—36S	43.56	37.56	21.59	37.56	M3 x 0.5
CL230—0050—7	50	DX10A—50S	52.45	46.45	30.48	46.45	M3 x 0.5
CL230—0051—0	68	DX10A—68S	63.88	57.88	41.91	57.88	M3 x 0.5
CL230—0052—2	80	DX10A—80S	71.5	65.5	49.53	65.5	M3 x 0.5
CL230—0043—1	100	DX10A—100S	84.2	78.2	62.23	78.2	M2.6 x 0.45

3.3 DX10-※※SE (Right Angle Dip, One Touch Lock, Lock Pin)





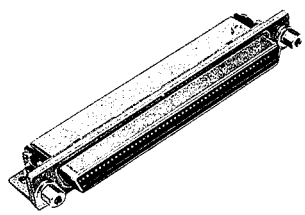


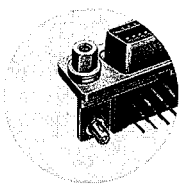
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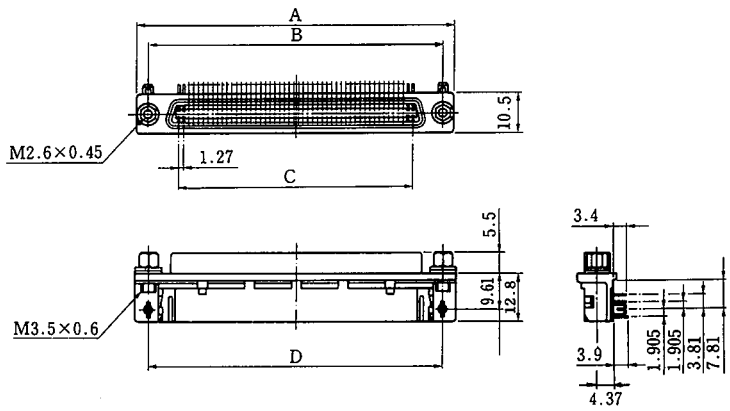
CL230-0274-4
DX10-20SE

HRS No.	No. of Pin	Part No.	A	B	C	D	E
CL230—0274—4	20	DX10—20SE	33.4	27.4	11.43	21.6	27.4

3.4 DX10A-※※SE (Right Angle Dip, Screw Lock, Lock Pin)





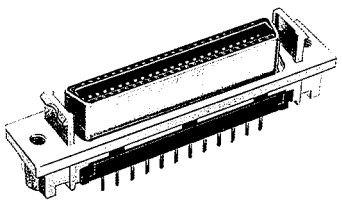


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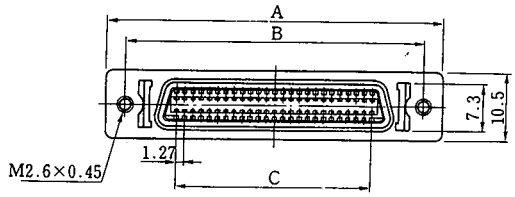
CL230-0262-5
DX10A-100SE

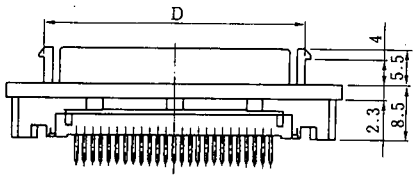
HRS No.	No. of Pin	Part No.	A	B	C	D
CL230-0262-5	100	DX10A-100SE	84.2	78.2	62.23	78.2

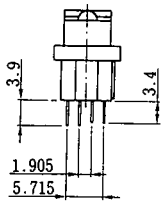
3.5 DX20-※※S (Straight Dip, One Touch Lock)



CL230-0068-2
DX20-50S



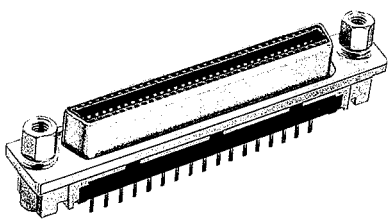




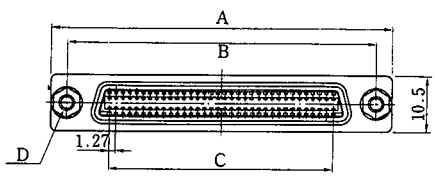
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D
CL230—0081—0	36	DX20—36S	43.56	37.56	21.59	31.76
CL230—0068—2	50	DX20—50S	52.45	46.45	30.48	40.65
CL230—0083—6	80	DX20—80S	71.5	65.5	49.53	59.7

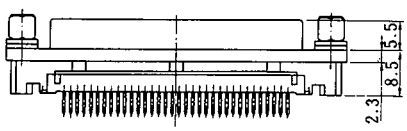
3.6 DX20A-※※S (Straight Dip, Screw Lock)

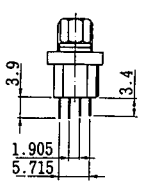


CL230-0144-9
DX20A-68S



Panel Thickness	No. of Washer
t = 0.7~1.0	Each 2 pieces
t = 1.5~1.8	Each 1 piece

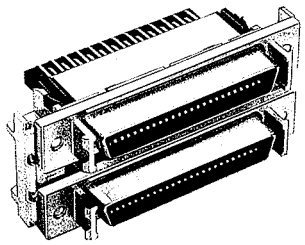




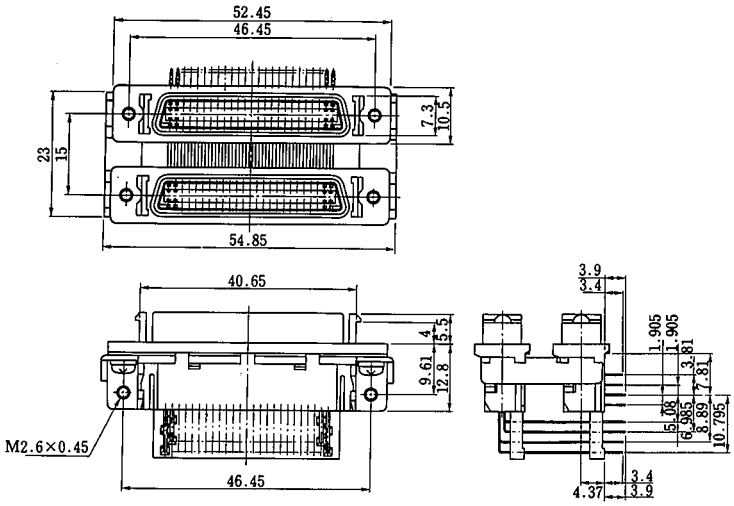
Unit:mm

HRS No.	No.of Pin	Part No.	A	B	C	D
CL230-0156-8	36	DX20A-36S	43.56	37.56	21.59	M3 × 0.5
CL230-0272-9	50	DX20A-50S	52.45	46.45	30.48	M3 × 0.5
CL230-0144-9	68	DX20A-68S	63.88	57.88	41.91	M3 × 0.5
CL230-0084-9	100	DX20A-100S	84.2	78.2	62.23	M2.6 × 0.45

3.7 DX10-50SW (Right Angle Dip, One Touch Lock, Double Layer)

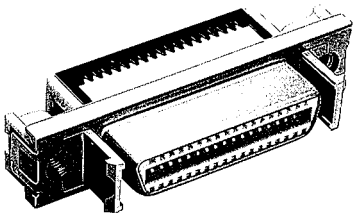


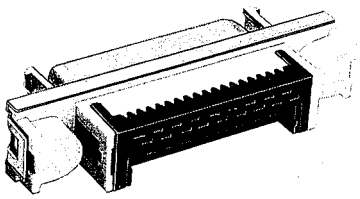
CL230-0069-5
DX10-50SW



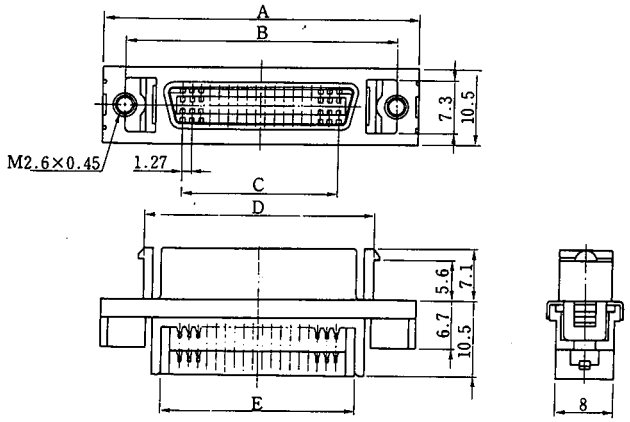
4. Cable to Cable Connector

4.1 DX30A※※S (Discrete Wire, Thin Cable, One Touch Lock)





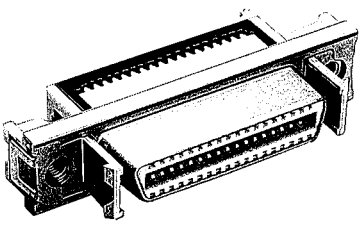
CL230-0185-6
DX30A-36S

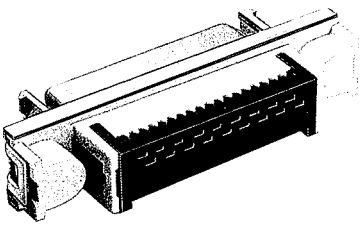


Unit: mm

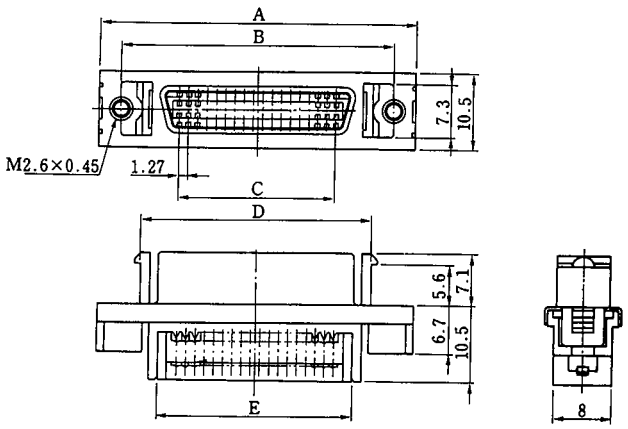
HRS No.	No. of Pin	Part No.	A	B	C	D	E
CL230—0185—6	36	DX30A—36S	44.56	37.56	21.59	31.76	29.34
CL230—0186—9	50	DX30A—50S	53.45	46.45	30.48	40.65	38.23

4.2 DX31A-※※S (Discrete Wire Laminated, Fine Cable, One Touch Lock)





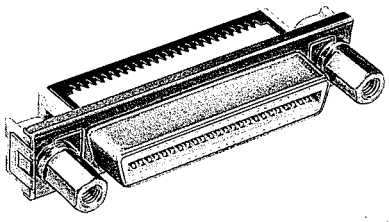
CL230-0141-0
DX31A-36S

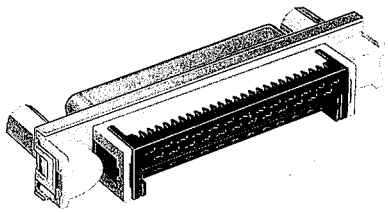


Unit: mm

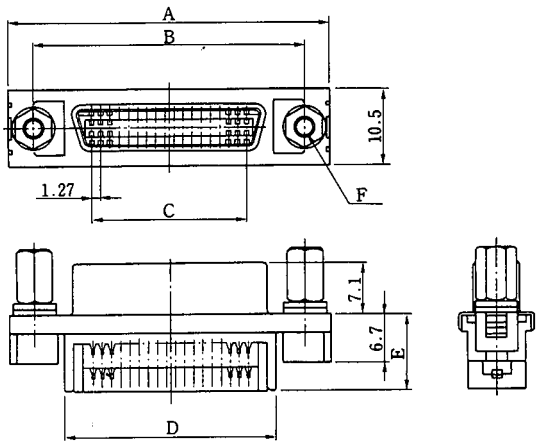
HRS No.	No. of Pin	Part No.	A	B	C	D	E
CL230—0101—6	20	DX31A—20S	33.4	27.4	11.43	21.6	19.18
CL230—0141—0	36	DX31A—36S	44.56	37.56	21.59	31.76	29.34
CL230—0190—6	50	DX31A—50S	53.45	46.45	30.48	40.65	38.23

4.3 DX30A-※※S-LNA (Discrete Thin Wire, Screw Lock)





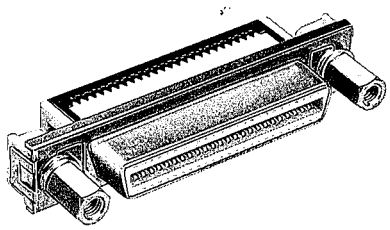
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DX30A-50S-LNA

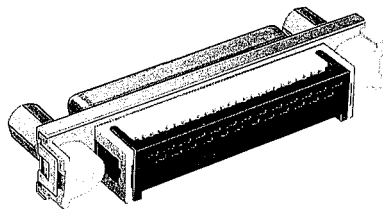


Unit: mm

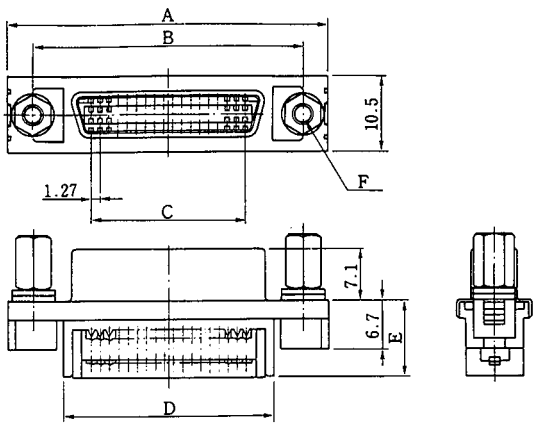
HRS No.	No. of Pin	Part No.	A	B	C	D	E	F
CL230—0167—4	36	DX30A—36S—LNA	44.56	37.56	21.59	29.34	10.5	M3 x 0.5
CL230—0189—7	50	DX30A—50S—LNA	53.45	46.45	30.48	38.23	10.5	M3 x 0.5
CL230—0168—7	100	DX30A—100S—LNA	86.82	78.2	62.23	69.98	11.5	M2.6 x 0.45

4.4 DX31A-※※S-LNA (Discrete Wire Laminated, Screw Lock)





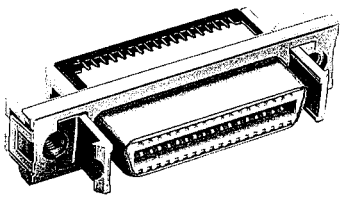
CL230-0193-4
DX31A-50S-LNA

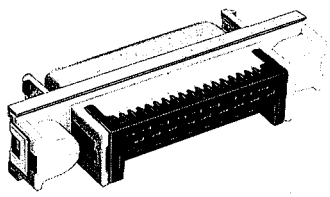


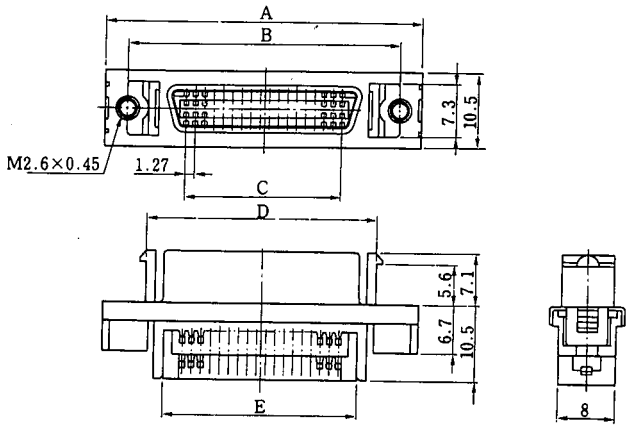
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D	E	F
CL230—0217—0	36	DX31A—36S—LNA	44.56	37.56	21.59	29.34	10.5	M3 x 0.5
CL230—0193—4	50	DX31A—50S—LNA	53.45	46.45	30.48	38.23	10.5	M3 x 0.5
CL230—0086—4	100	DX31A—100S—LNA	86.82	78.2	62.23	69.98	11.5	M2.6 x 0.45

4.5 DX32A-※※S (Discrete Wire Laminated, Ribbon Cable, One Touch Lock)





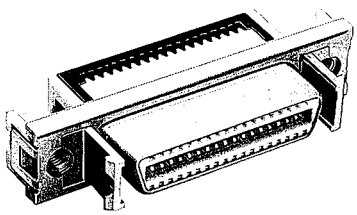


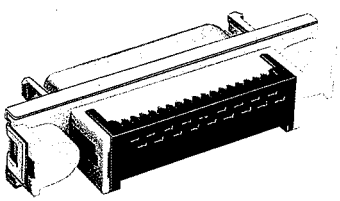
CL230-0195-0
DX32A-36S

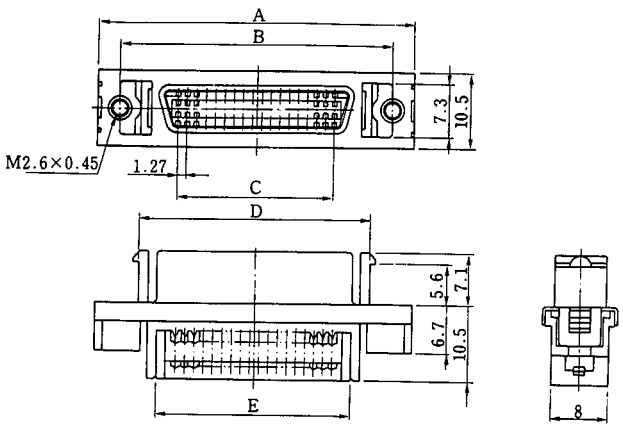
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D	E
CL230−0195−0	36	DX32A−36S	44.56	37.56	21.59	31.76	29.34

4.6 DX33A-※※S (Group IDC, Flat Ribbon Cable, One Touch Lock)





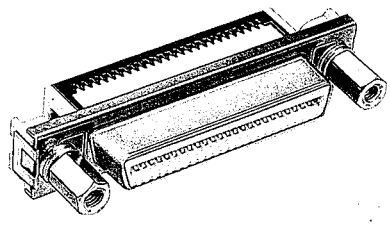


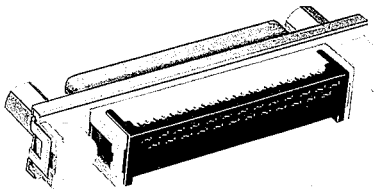
CL230-0202-3
DX33A-36S

Unit: mm

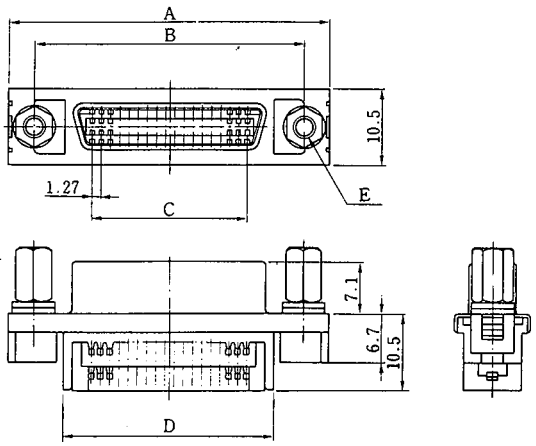
HRS No.	No. of Pin	Part No.	A	B	C	D	E
CL230−0202−3	36	DX33A−36S	44.56	37.56	21.59	31.76	29.34
CL230−0203−6	50	DX33A−50S	53.45	46.45	30.48	40.65	38.23

4.7 DX32A-※※S-LNA (Loose Piece IDC, Slit Ribbon Cable, Screw Lock)





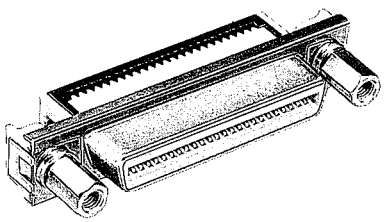
CL230-0199-0
DX32A-50S-LNA

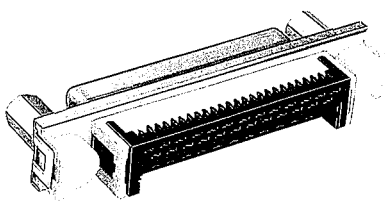


Unit: mm

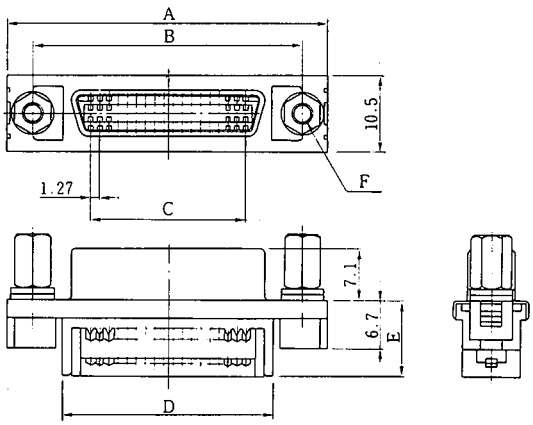
HRS No.	No. of Pin	Part No.	A	B	C	D	E
CL230—0199—0	50	DX32A—50S—LNA	53.45	46.45	30.48	38.23	M3 x 0.5

4.8 DX33A ※※S-LNA (Group IDC, Flat Ribbon Cable, Screw Lock)





CL230-0206-4
DX33A-50S-LNA

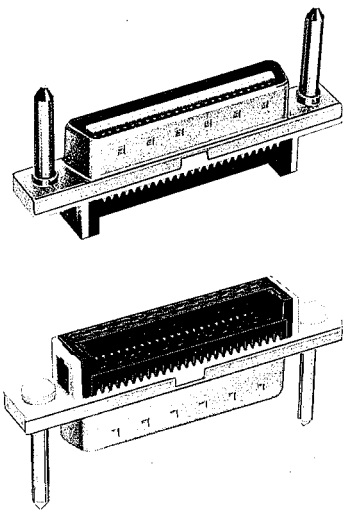


Unit:mm

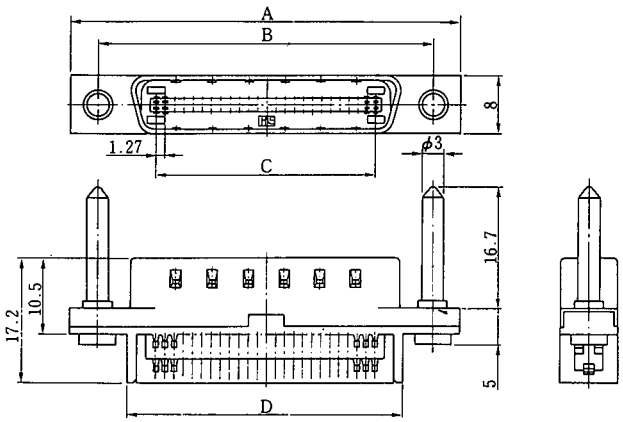
HRS No.	No.of Pin	Part No.	A	B	C	D	E	F
CL230-0206-4	50	DX33A-50S-LNA	53.45	46.45	30.48	38.23	10.5	M3 X 0.5
CL230-0171-1	100	DX33A-100S-LNA	86.82	78.2	62.23	69.98	11.5	M2.6 X 0.45

5. Plug In Connector

5.1 DX30A-※※P-PG (Discrete Thin Wire)



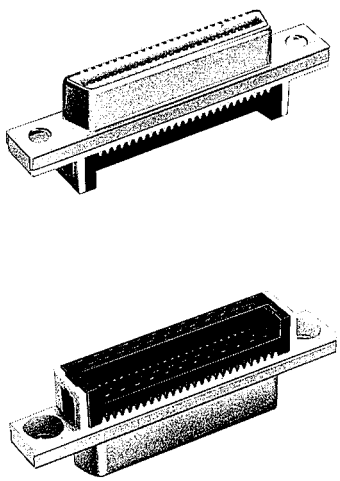
CL230-0152-7
DX30A-50P-PG



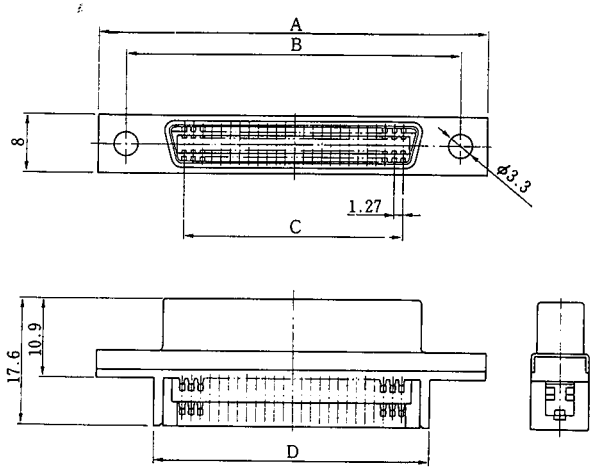
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D
CL230—0061—3	28	DX30A—28P—PG	40.0	32.48	16.51	24.26
CL230—0135—8	36	DX30A—36P—PG	45.08	37.56	21.59	29.34
CL230—0152—7	50	DX30A—50P—PG	53.97	46.45	30.48	38.23

5.2 DX30A-※※S-SG (Discrete Thin Wire)



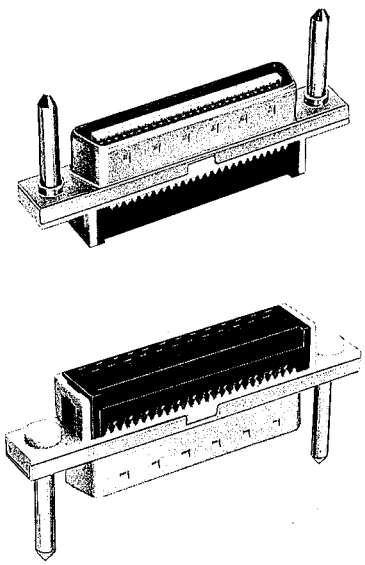
CL230-0153-0
DX30A-50S-SG



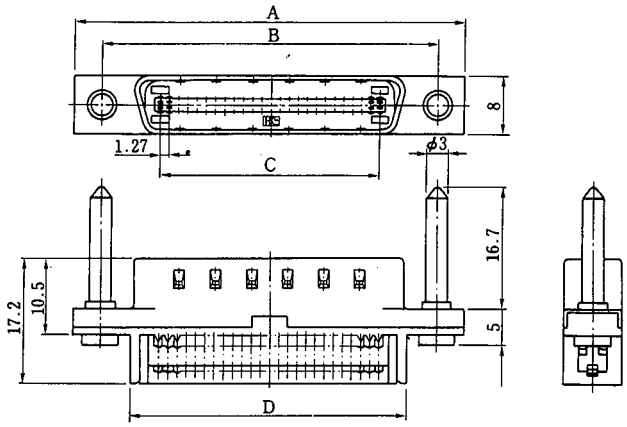
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D
CL230-0062-6	28	DX30A-28S-SG	40.0	32.48	16.51	24.26
CL230-0153-0	50	DX30A-50S-SG	53.97	46.45	30.48	38.23

5.3 DX31A-※※P-PG (Discrete Wire Laminated)



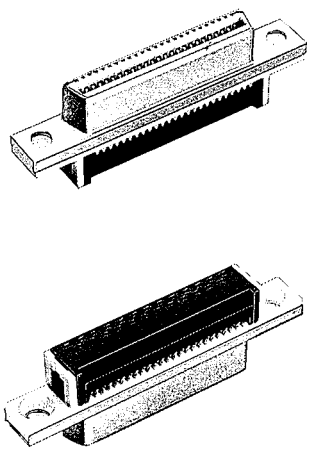
CL230-0162-0
DX31A-50P-PG



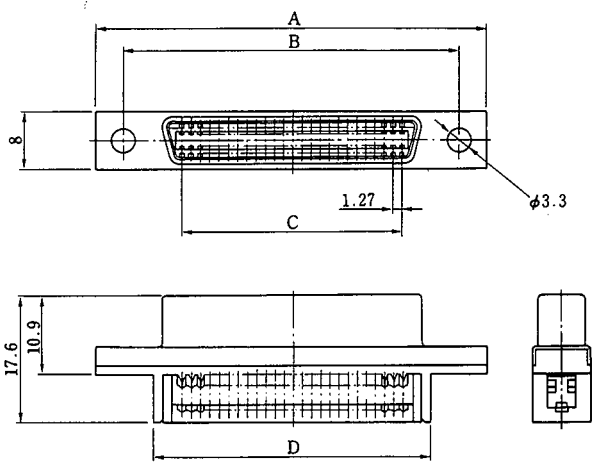
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D
CL230-0160-5	28	DX31A-28P-PG	40.0	32.48	16.51	24.26
CL230-0162-0	50	DX31A-50P-PG	53.97	46.45	30.48	38.23

5.4 DX31A-※※S-SG (Discrete Wire Laminated)



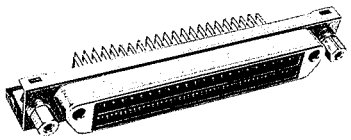
CL230-0165-9
DX31A-50S-SG



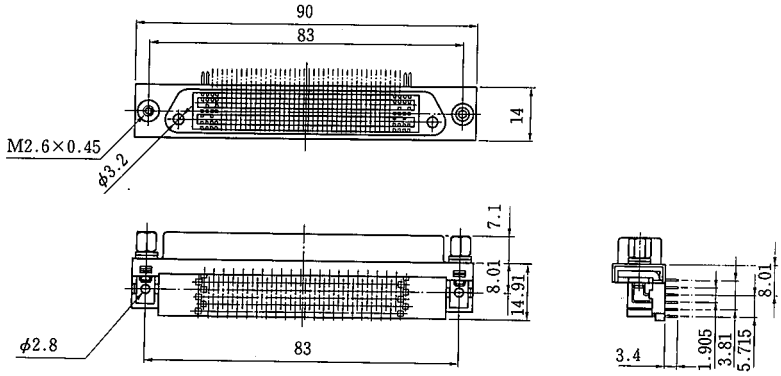
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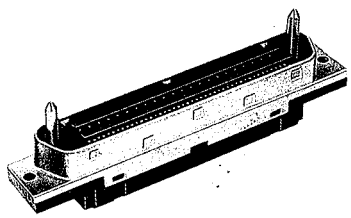
HRS No.	No. of Pin	Part No.	A	B	C	D
CL230—0163—3	28	DX31A—28S—SG	40.0	32.48	16.51	24.26
CL230—0164—6	36	DX31A—36S—SG	45.08	37.56	21.59	29.34
CL230—0165—9	50	DX31A—50S—SG	53.97	46.45	30.48	38.23

6. Multipole Connector (132 pins)

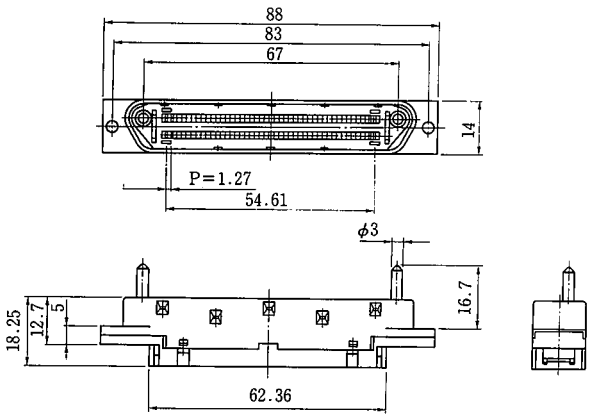


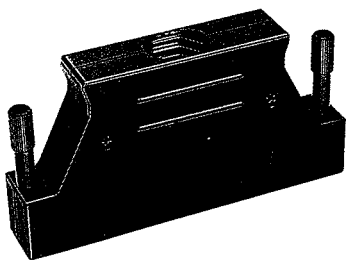
CL230-0225-9
DX10A-132S



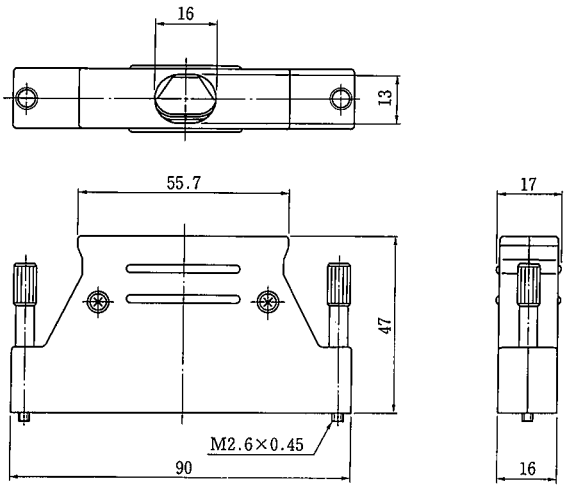


CL230-0224-6
DX30A-132P





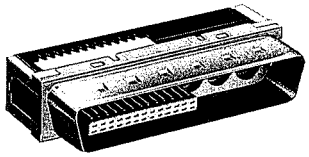
CL230-0232-4
DX-132-CV1

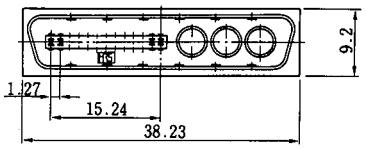


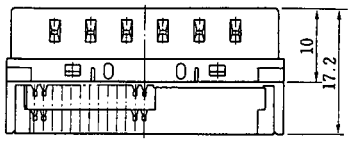
7. Co-axial Connector
7.1 Co-axial, Signal Terminal Connector

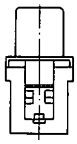
Applicable coaxial contact
CL313-0351-6
MJ-P-1.5CV(P)

Applicable Cable
Sumitomo Electric Industrial Co., Ltd.
UL20121 (80°C, 30V)
Complex 29 pins cable with double shield
(Light Beige)

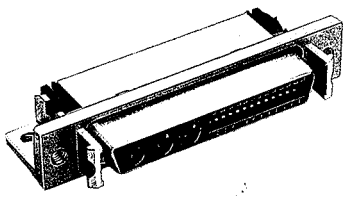


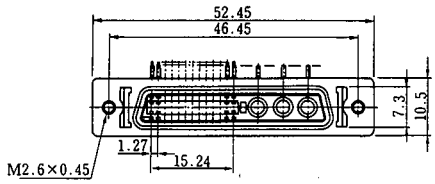


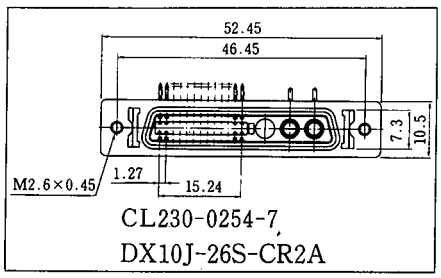




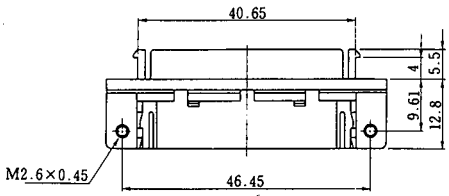
CL230-0148-0
DX30AJ-26P-CP3

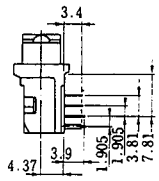


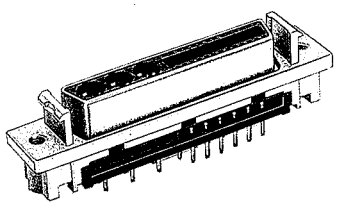


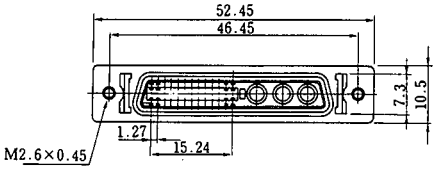


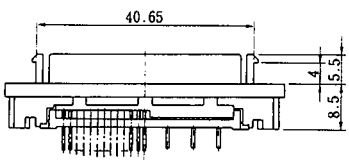
CL230-0063-9
DX10J-26S-CR3

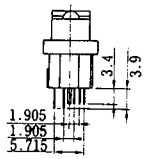






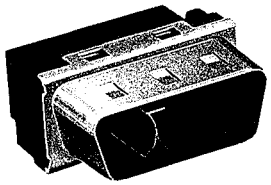


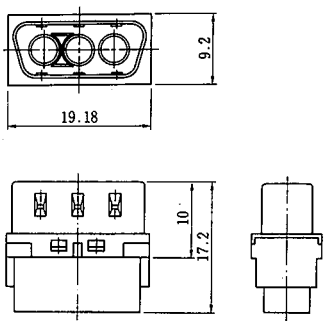




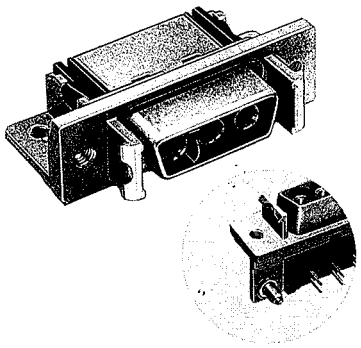
CL230-0064-1
DX20J-26S-CR3

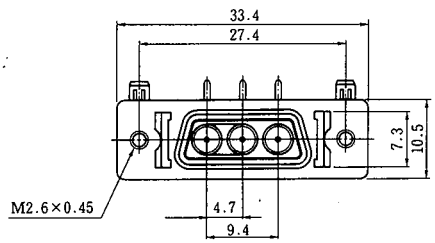
7.2 Co-axial Connector (Prevention of Mis-insertion)

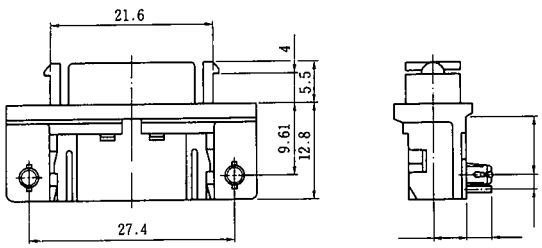




CL230-0269-4
DXJ-0P-CP3-A

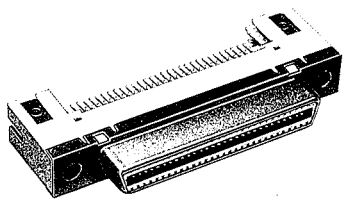


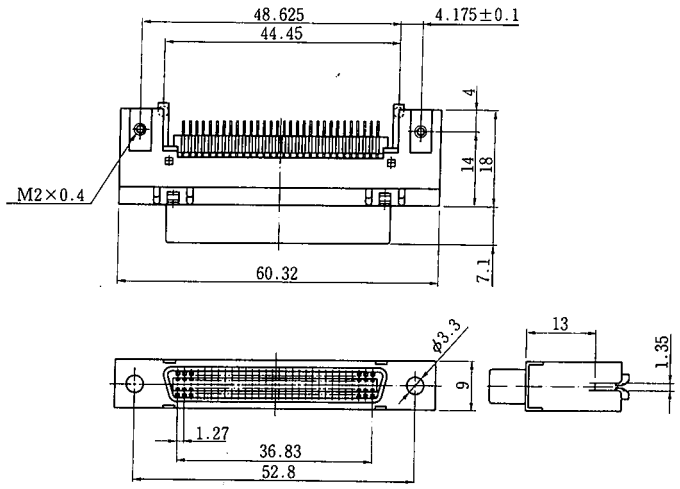




CL230-0268-1
DX10J-0SE-CR3/A

8. SMT Connector
8.1 DX10S-60S-SG Socket





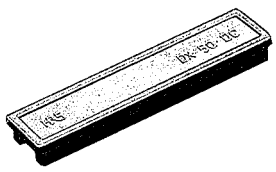
(Board thickness: 1.2mm)

CL230-0238-0
DX10S-60S-SG

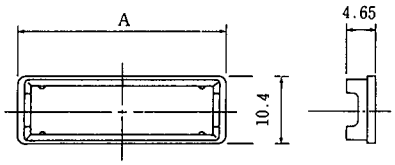
(In board mounting, refer to P.225)

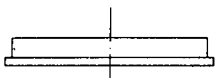
9. Dust Cap

9.1 DX-※※-DC (Semi-Hard, for One Touch Lock)

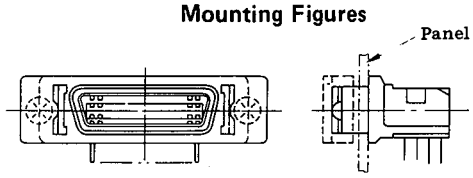


CL230-0104-4
DX-50-DC





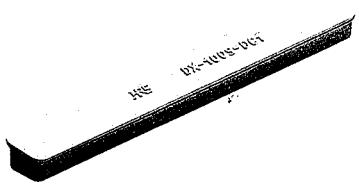
Mounting Figures



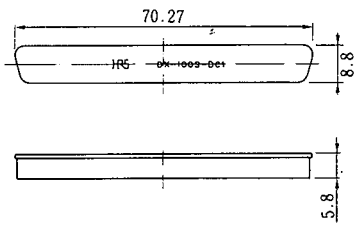
Unit: mm

HRS No.	No. of Pin	Part No.	A
CL230—0103—1	20	DX—20—DC	27.35
CL230—0045—7	28	DX—28—DC	32.43
CL230—0241—5	36	DX—36—DC	37.5
CL230—0104—4	50	DX—50—DC	46.4
CL230—0078—6	68	DX—68—DC	57.83
CL230—0046—0	80	DX—80—DC	65.45

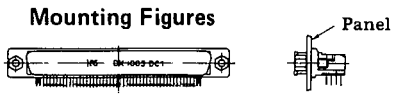
9.2 DX-100S-DC1 (Semi-Hard, for One-Touch Locking, for Screw Lock)



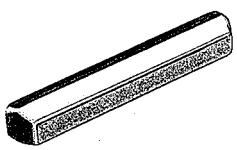
CL230-0114-8
DX-100S-DC1



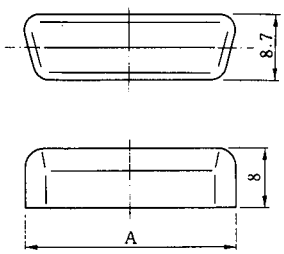
Mounting Figures



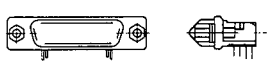
9.3 DX-※※S-DC2 (Soft Hard, for One-Touch Locking, for Screw Lock)



CL230-0105-7
DX-36S-DC2



Mounting Figures

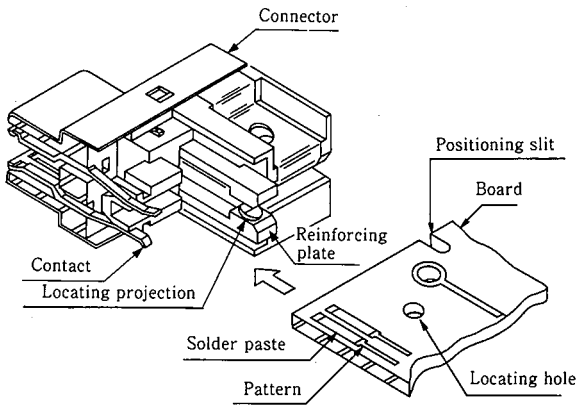


Unit: mm

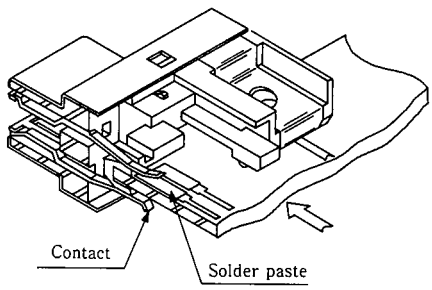
HRS No.	No. of Pin	Part No.	A
CL230—0105—7	36	DX—36S—DC2	28.07
CL230—0264—0	50	DX—50S—DC2	36.96
CL230—0106—0	68	DX—68S—DC2	48.39

SMT Mounting Instructions

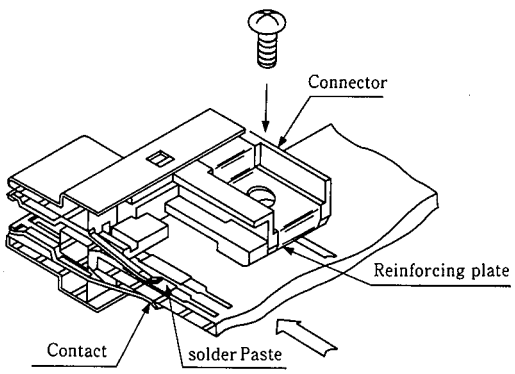
1. Insert board in connector until the projections for locating the reinforcing plate stop in the locating holes on the board.



2. When the projections for locating the reinforcing plate are on the surface of the board, a gap exists between the solder paste on the board and the connector contacts.

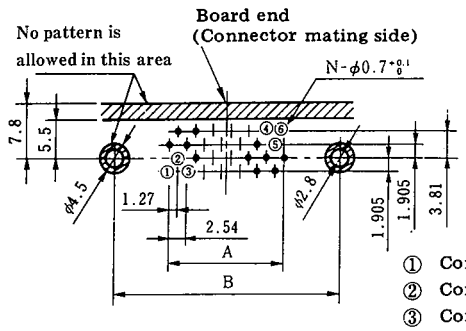


3. When the board is inserted fully, the locating projections snap into the locating holes on the board, allowing the connector contacts to close and make contact with the solder paste.



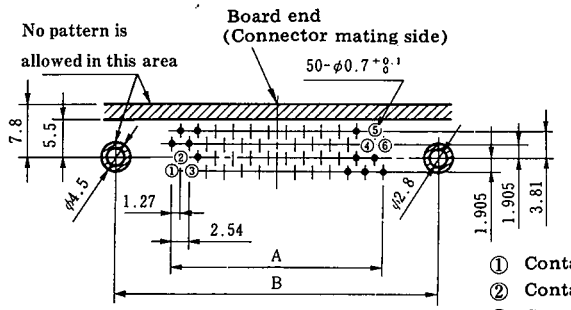
PC Board Layout (Recommended board thickness : 1.6mm)

DX10, DX10A—※※S



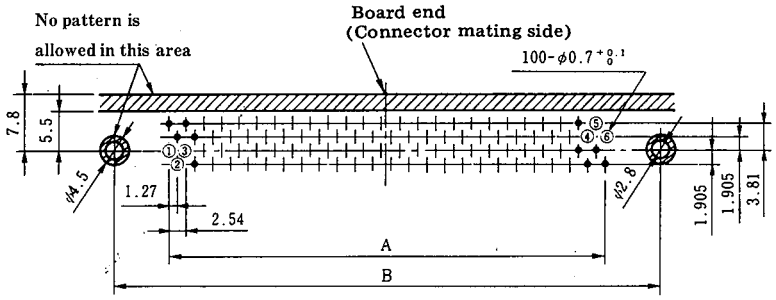
(20, 28, 36, 68, 80 Pin)

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)



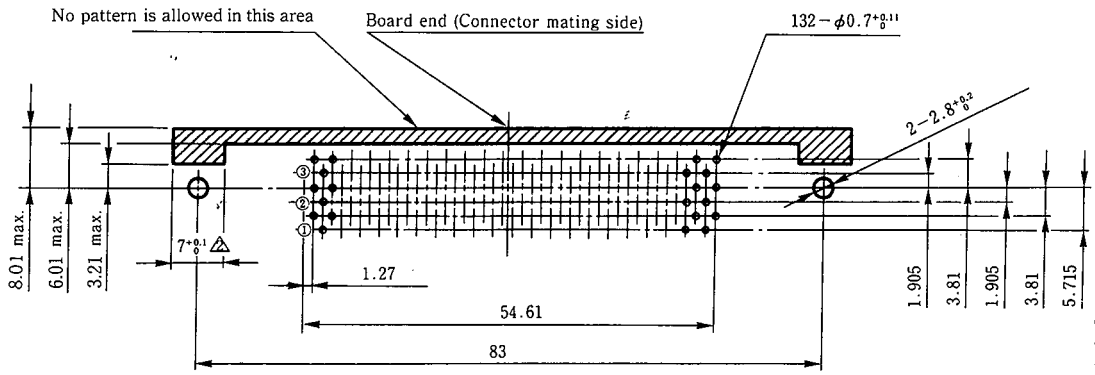
(50 Pin)

① Contact No.1
② Contact No.2
③ Contact No.3
④ Contact No.48
⑤ Contact No.49
⑥ Contact No.50



(100 Pin)

① Contact No.1
② Contact No.2
③ Contact No.3
④ Contact No.98
⑤ Contact No.99
⑥ Contact No.100



(132 pin)

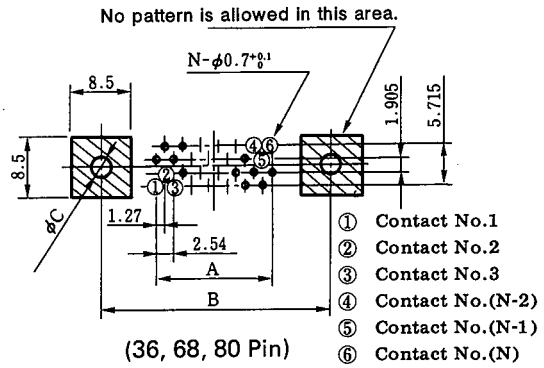
① Terminal No.1
① Terminal No.45
① Terminal No.89

Unit: mm

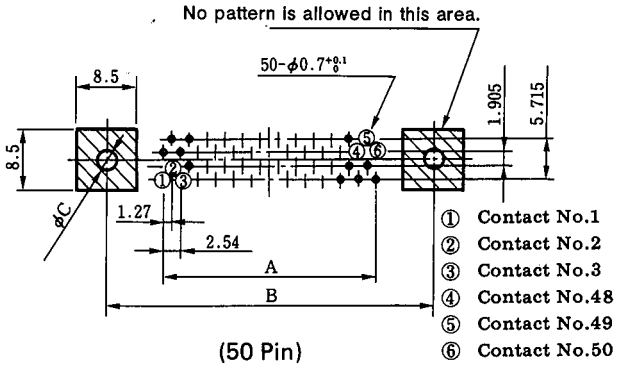
HRS No.	No. of Pin	Part No.	A	B
CL230—0001—1	20	DX10—20S	11.43	27.4
CL230—0047—2		DX10A—20S		
CL230—0002—4	28	DX10—28S	16.51	32.48
CL230—0048—5		DX10A—28S		
CL230—0003—7	36	DX10—36S	21.59	37.56
CL230—0049—8		DX10A—36S		
CL230—0004—0	50	DX10—50S	30.48	46.45
CL230—0050—7		DX10A—50S		

HRS No.	No. of Pin	Part No.	A	B
CL230—0005—2	68	DX10—68S	41.91	57.88
CL230—0051—0		DX10A—68S		
CL230—0006—5	80	DX10—80S	49.53	65.5
CL230—0052—2		DX10A—80S		
CL230—0043—1	100	DX10A—100S	62.23	78.2
CL230—0225—9	132	DX10A—132S	54.61	83

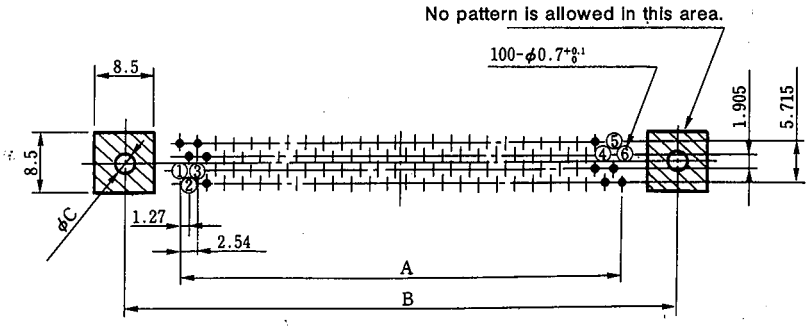
DX20, DX20A—※※S



(36, 68, 80 Pin)



(50 Pin)



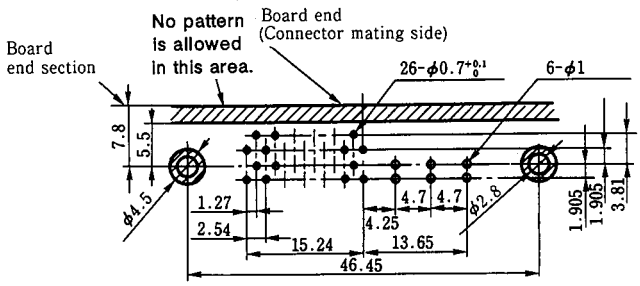
(100 Pin)

Unit: mm

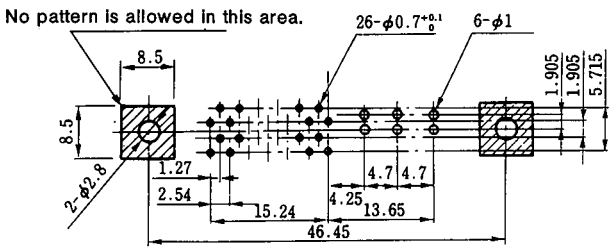
HRS No.	No. of Pin	Part No.	A	B	C
CL230—0081—0	36	DX20—36S	21.59	37.56	2.8
CL230—0068—2	50	DX20—50S	30.48	46.45	2.8
CL230—0144—9	68	DX20A—68S	41.91	57.88	3.7
CL230—0158—3	80	DX20—80S	49.53	65.5	3.7
CL230—0084—9	100	DX20A—100S	62.23	78.2	3.7

Coaxial-Connector

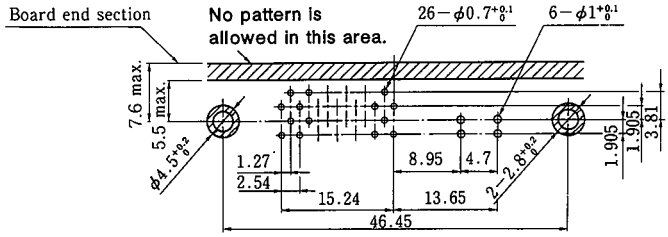
DX10J—26S—CR3



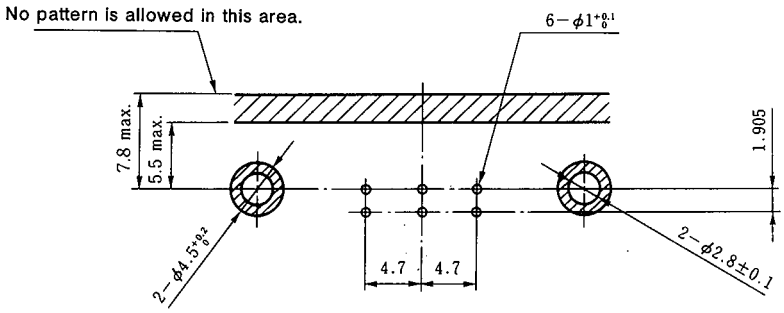
DX20J—26S—CR3



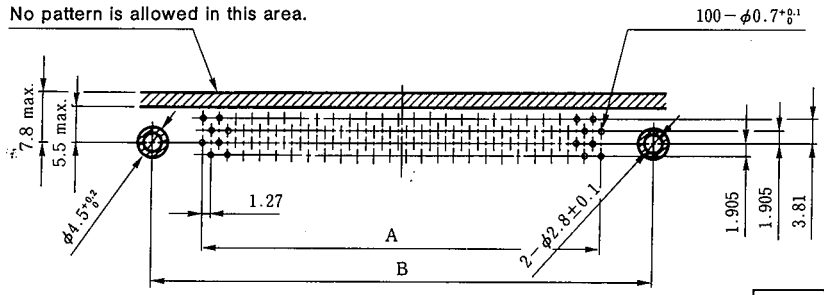
DX10J—26S—CR2A



DX10J(1)-OSE-CR3/A



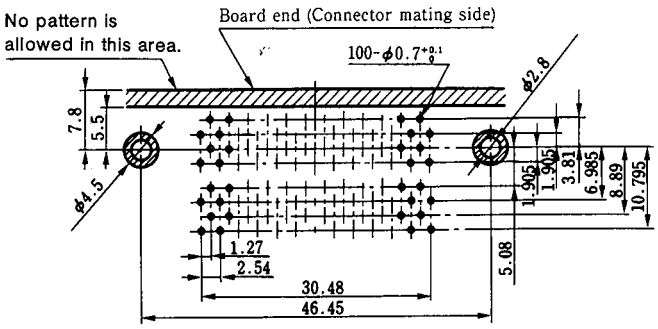
DX10-※SE



Unit: mm

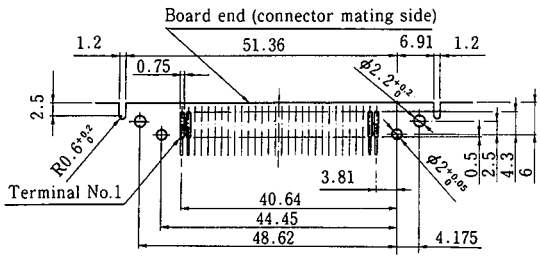
HRS No.	No. of Pin	Part No.	A	B
CL230−0274−4	20	DX10A−20SE	11.43	27.4
CL230−0262−5	100	DX10A−100SE	62.23	78.2

DX10-50SW



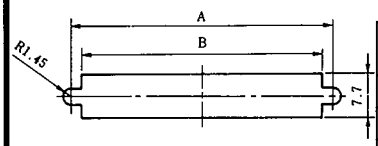
SMT Connector

DX10S−60S−SG



Panel-Fitting Dimensional Drawing (Recommended panel thickness:1.6mm)

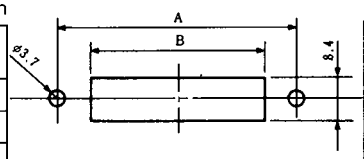
One-Touch Lock Type



Unit: mm

No. of Pin	A	B
20	27.4	23.7
28	32.48	28.78
36	37.56	33.86
50	46.45	42.75
68	57.88	54.18
80	65.5	61.8

Screw Lock Type

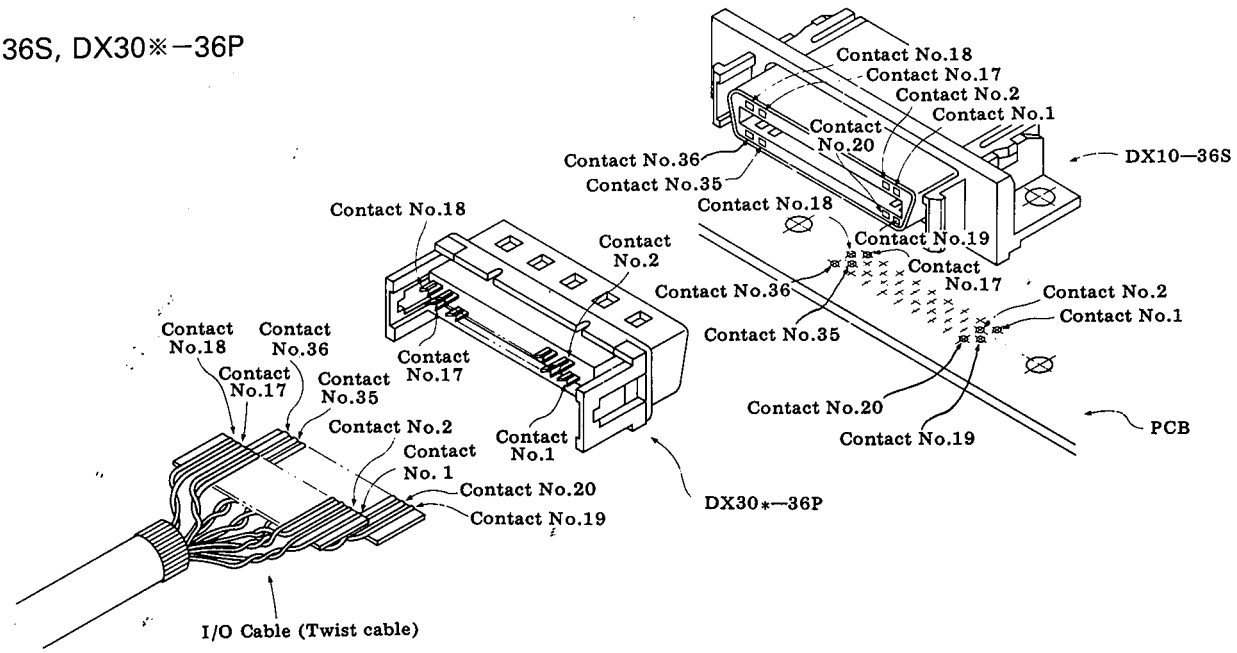


Unit: mm

No. of Pin	A	B
20	27.4	18.81
28	32.48	23.89
36	37.56	28.97
50	46.45	37.86
68	57.88	49.29
80	65.5	56.91
100	78.2	69.61

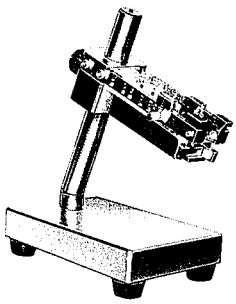
DX Connector Distribution Diagram

DX10—36S, DX30※—36P

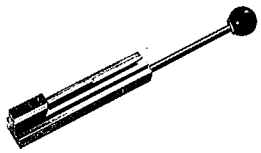


Connecting Method (for Discrete Cable)

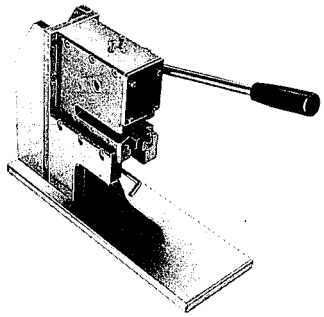
• Connecting Tools



DX30 Cable Distribution Jig

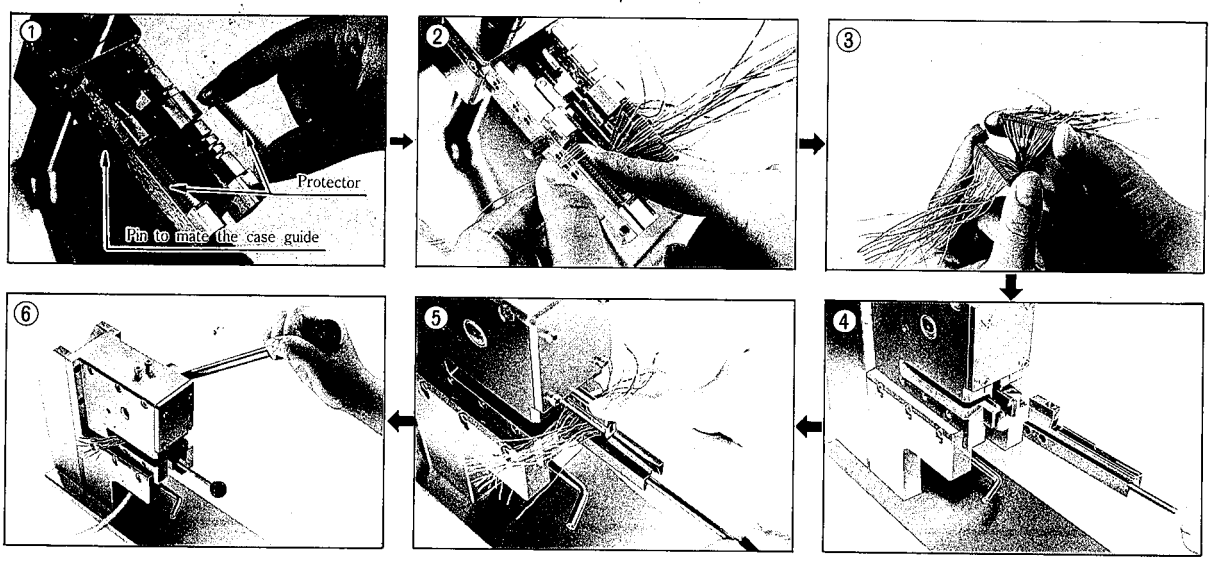


Guide Plate
DX30—※※GP
※※(20, 28, 36, 50, 68, 80)



Connecting Press DX30-HR

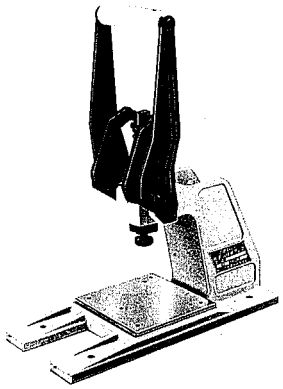
• Connecting Order



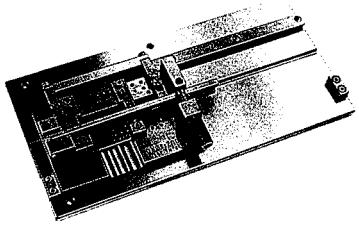
1. Mate the case guide of the distribution jig to the number of pins of the connector and set the protector.
2. Clamp the cable and distribute every one of the signal wires.
3. Combine the two protectors and temporarily fix it to the connector unit.
4. Set the guide plate (DX30—**GP) to the connecting press DX30—HP.
5. Set the connector to the guide plate and insert the guide plate in the connecting press DX30—HP.
6. Depress the handle. (With this the connection and the cutting of a remaining part of cable have been completed)

Connecting Method (for Cadle Pitch 1.27mm)

• Connecting Tools



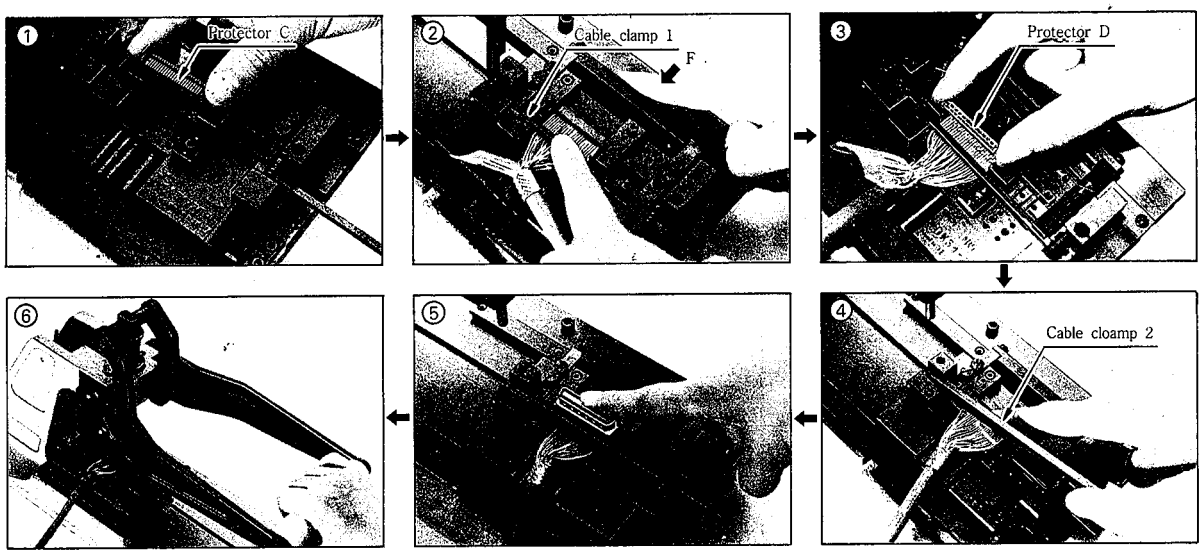
Connecting Press
Hi-Flex Connecting Press



Guide Plate
DX31–2080GP (For 20P ~ 80P)
DX31–100GP (For 100P)

Note: Comes with a pressure block

• Connecting Order



1. Set the guide plate in the connecting press and set the Protector C in the guide plate.
2. Set the first cable. (Fix the first cable with the cable clamp 1 of the guide plate)
3. Combine the Protector D with the Protector C.
4. Set the second cable. (With the cable clamp 2 of the guide plate, fix the second cable)
5. Place the connector body over the protector.
6. Shift the slide base to the position to crimp and depress the handle. (With this the connection has been completed)

List of Connecting jigs and Accessories

Plug Connector

Cable	Connector Name	Wire Configuration	Crimping (Connection)	
			Press	Guide plate
I/O Cable (Discrete wire)	DX30-20P DX30A-20P	By hand DX30 Cable distribution JIG CL902-0116-1 Semi-Auto machine SA200/DX30 CL903-0003-1 Automatic machine AM200/DX30 CL903-0030-4	Connecting press DX30-HP CL902-0117-4	DX30-20GP CL902-0118-7
	DX30-26P DX30A-26P			DX30-26GP CL902-0119-0
	DX30-36P DX30A-36P			DX30-36GP CL902-0120-9
	DX30-50P DX30A-50P			DX30-50GP CL902-0121-1
	DX30-68P DX30A-68P			DX30-68GP CL902-0122-4
	DX30-80P DX30A-80P			DX30-80GP CL902-0123-7
	DX30-100P DX30A-100P			DX30-100GP CL902-2031-1
I/O Cable (1.27mm pitch fusion welding cable)	DX31-20P DX31A-20P	———	Hi-Flex Connecting press HHP-502 CL550-0082-2	DX31-2080GPA (Common to 20P-80P) CL902-2003-6 (Comes with pressure block)
	DX31-26P DX31A-26P			
	DX31-36P DX31A-36P			
	DX31-50P DX31A-50P			
	DX31-68P DX31A-68P			
	DX31-80P DX31A-80P			
	DX31-100P DX31A-100P			DX31-100GPA CL902-0125-2 (100pin private) (Comes with pressure block)

Extension Connector

Cable	Connector Name	Wire Configuration	Crimping (Connection)	
			Press	Guide plate
I/O Cable (Discrete wire) Ribbon Cable (IDC)	DX30A-20S	By hand DX30 Cable distribution JIG CL902-0116-1 Semi-Auto machine SA200/DX30 CL903-0003-1 Automatic machine AM200/DX30 CL200/DX30	DX30-SHP CL902-0229-8	DX30-20SGP CL902-0292-4
	DX30A-36S DX32A-36S			DX30-36SGP CL902-0234-8
	DX30A-50S DX30A-50S-LNA DX32A-50S-LNA			DX30-50SGP CL902-0235-0
	DX30A-100S-LNA			DX30-100SGP CL902-0230-7
I/O Cable (1.27mm pitch fusion welding cable) Ribbon Cable	DX31A-20S	———	Hi-Flex Connecting press HHP-502 CL550-0082-2	DX31-2080SGPA (Common to 20P-80P) CL902-2013-0 (Comes with pressure block)
	DX31A-36S DX31A-36S-LNA DX33A-36S			
	DX31A-50S DX31A-50S-LNA DX33A-50S DX33A-50S-LNA			
	DX31A-100S-LNA DX33A-100S-LNA			DX31-100SGPA CL902-0246-7 (100pin private) (Comes with pressure block)

Note : Please assembly cable without lock screws. (LNA type)

Plug in Connector

Cable	Connector Name	Wire Configuration	Crimping		Remaining part cutting	
			Press	Unit	Press	Unit
I/O Cable (Discrete wire)	DX30A-28P-PG DX30A-36P-PG DX30A-50P-PG DX30A-28S-SG DX30A-36S-SG DX30A-50S-SG	By hand DX30 Cable distribution JIG CL902-0116-1 Semi-Auto machine SA200/DX30 CL903-0003-1 Automatic machine AM200/DX30 CL903-0030-4	DX30AM-HP1 CL902-0210-0	DX30A-PG-GPT DX30A-SG-GPT	DX30AM-HP1 CL902-0210-0	DX30A-PSG-C

Cable	Connector Name	Wire Configuration	Crimping		
			Press	Guide plate	Pressure block
I/O Cable (1.27mm pitch fusion welding cable)	DX31A-28P-PG DX31A-36P-PG DX31A-50P-PG DX31A-28S-SG DX31A-36S-SG DX31A-50S-SG	———	Hi-Flex Connecting press HHP-502 CL550-0082-2	DX31-PSG-GPA CL902-2024-6	DX31A-PG-PB CL902-2025-9 DX31A-SG-PB CL902-2026-1

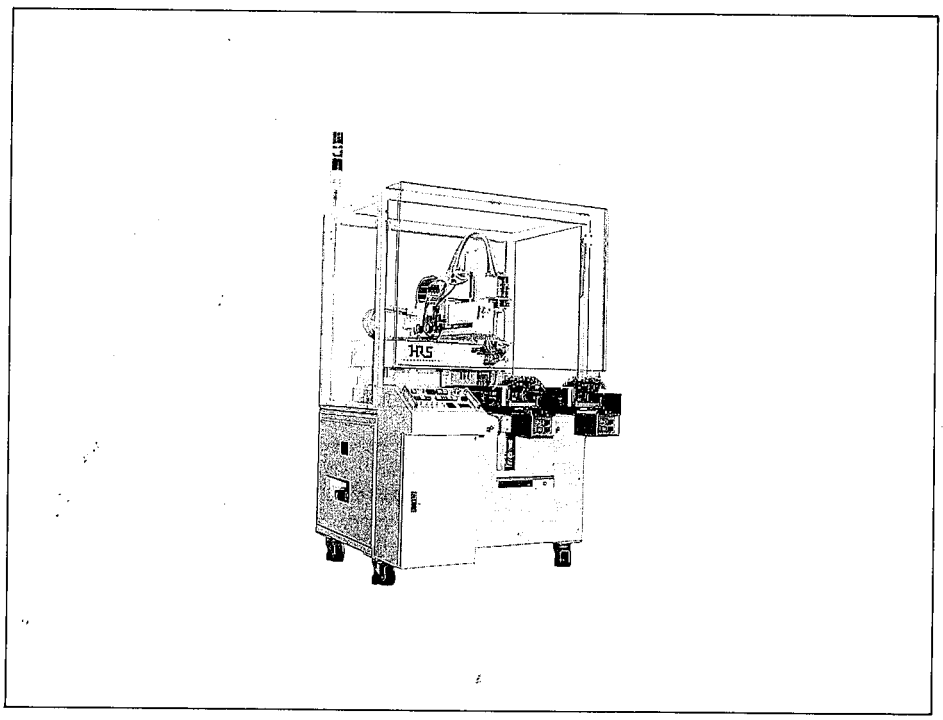
Coaxial Connector

Cable	Connector Name		Coaxial Connector Connection			Plug Connector Connection				
	Plug Connector	Coaxial Signal Connector	Inner Conductor Crimping		Shell Contact Caulking	Wire Configuration	Crimping		Shield case fixing	Hood insertion
			Crimping machine	Applicator			Press	Guide plate		
I/O Cable Coaxial Complex Cable	DX30AJ-26P-CP3 DXJ-OP-CP3/A	MJ-P-1.5CV(P)	CM-105 CL901-0005-4	AP-105-MJ-1.5CV CL901-3001-0	MJ-P-1.5CV(P)-CCT(01)	DX30J-CAT(01)	DX30-HP CL902-0117-4	DX30J-26GP	DX30J-CCT (01)	DX30J-HPT
						———				

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^2
3.	Dimensions and weight of the main unit	1,100mm W × 1,150mm D × 1,720mm H (not including circular indicating lamp) Weight 400kg
4.	Cables to be used	AWG #28 (0.58mm φ)