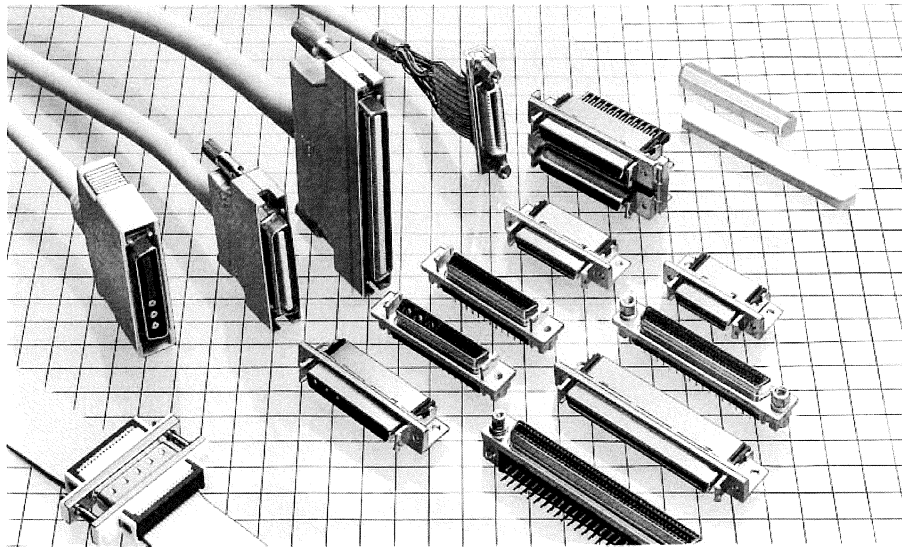


# DX SERIES HIGH-DENSITY I/O CONNECTORS

## General

DX 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. 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. 1.27mm (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 & # 30 wires.
5. Group IDC termination of 1.27mm 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.

## Application

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

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## Specifications

Items	Standard value
Current capacity	0.5A
Rated voltage	AC125V
Insulation resistance	250M $\Omega$ or more at DC100V
Contact resistance	50m $\Omega$ 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.	$\phi$ 0.5	$\phi$ 0.58
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

<u>DX</u>	10	※	※	—	50	S	—	※	(50)
(1)	(2)	(3)	(5)		(6)	(7)		(8)	(12)

### ● Plug Connector

<u>DX</u>	30	A	※	—	50	P	—	※	(50)
(1)	(2)	(4)	(5)		(6)	(7)		(8)	(12)

### ● Co-axial Connector

<u>DX</u>	30	A	J	—	26	P	—	CP3	(50)
(1)	(2)	(4)	(5)		(10)	(7)		(8)	(12)

<u>DX</u>	10	J	—	0	SE	—	CR3	/	A	(50)
(1)	(2)	(5)		(10)	(7)		(8)		(11)	(12)

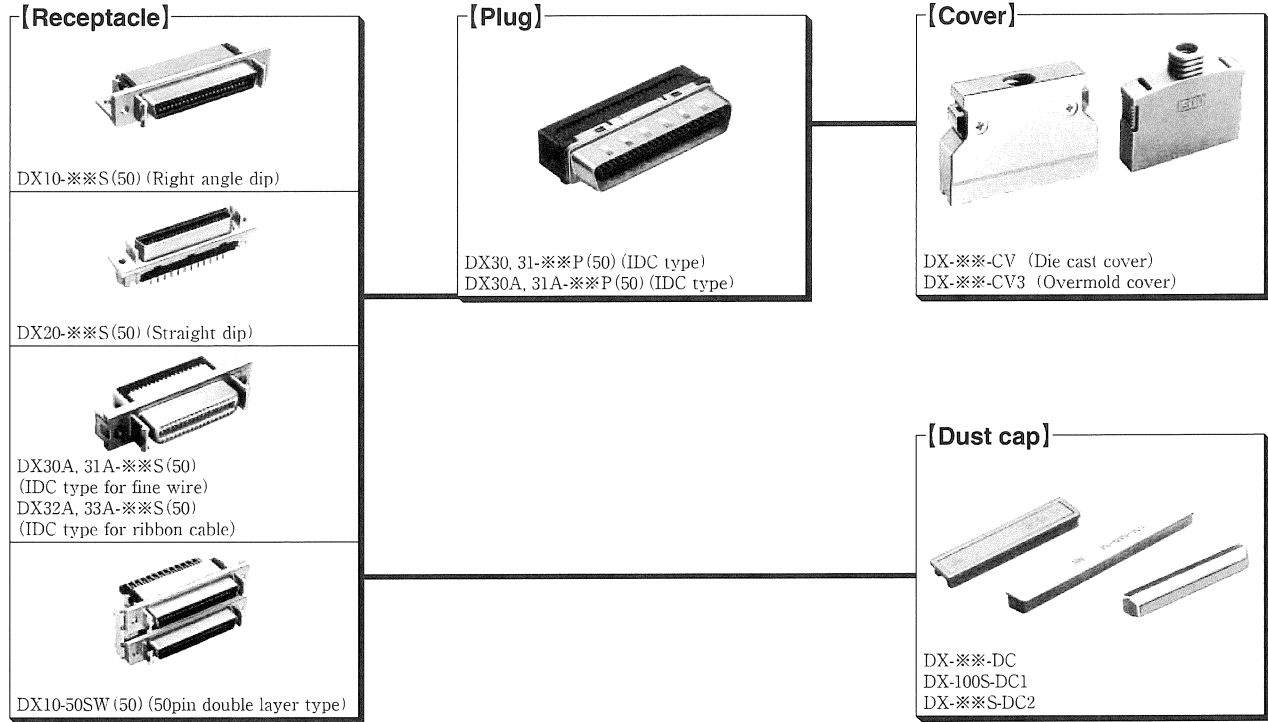
### ● Accessories

<u>DX</u>	—	50	—	CV	(50)
(1)		(6)		(9)	(12)

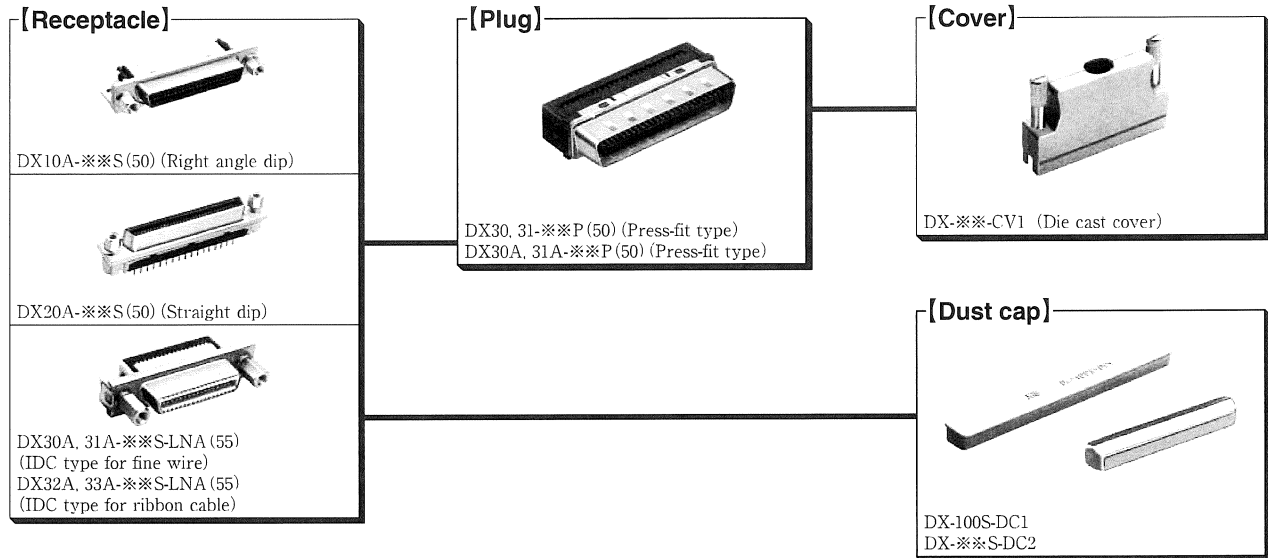
- (1) Series Number: DX
- (2) Connection Type  
 10: Right Angle Dip  
 20: Straight Dip  
 30: IDC for discrete thin wire (AWG # 28 and 30)  
 31: IDC for discrete wire laminated (AWG # 28 and 30)  
 32: IDC for slit ribbon cable (AWG # 28)  
 33: IDC for flat ribbon cable (AWG # 28)
- (3) Lock Type  
 Blank: One Touch Lock  
 A : Screw Lock
- (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
- (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
- (12) Specifications Content  
 (※※) : Individual specifications

## DX Series variations

### ● One-touch lock I/O connector

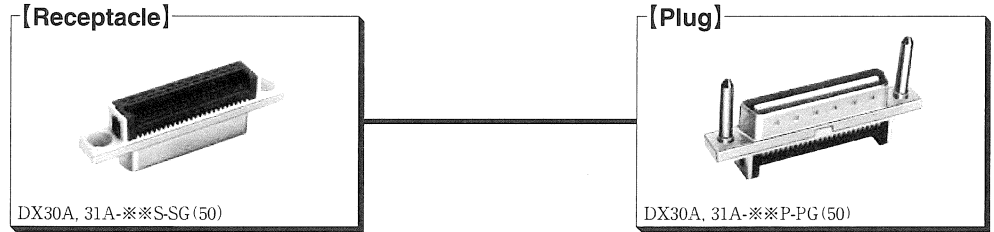


### ● Screw lock I/O connector

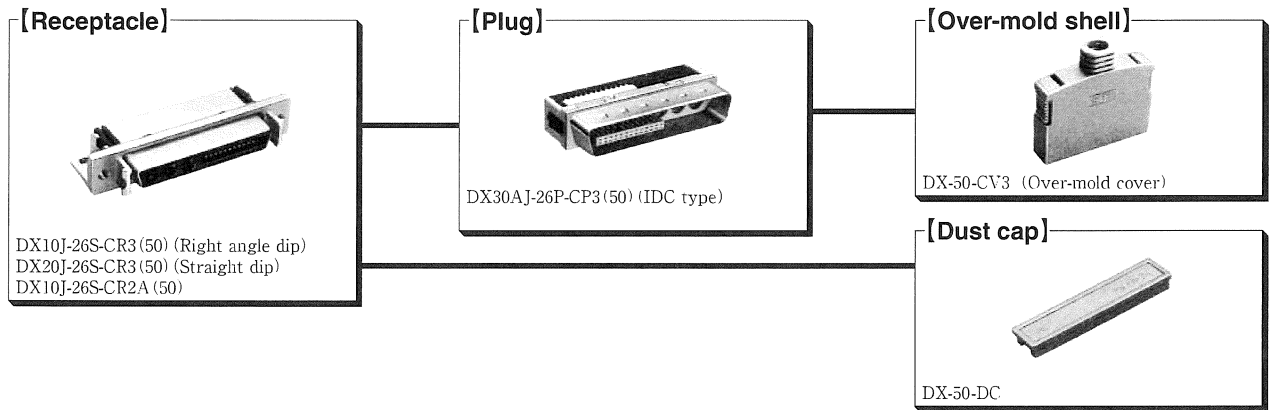


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● Plug-in connector



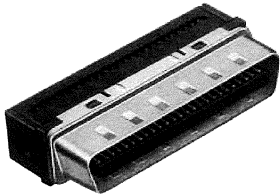
● I/O connector with co-axial contact



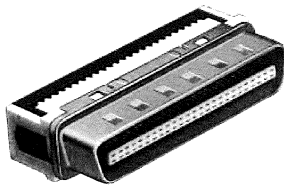
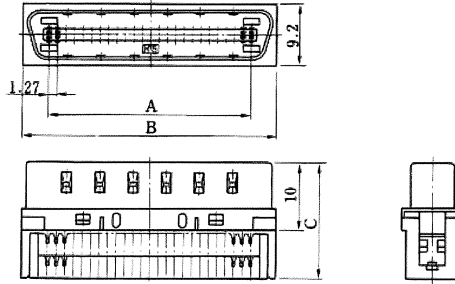
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# 1. IDC Plug Connector

## 1.1 DX30, DX30A-※※P (50)



DX30-50P(50)

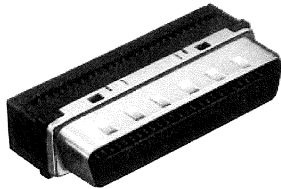


DX30A-50P(50)

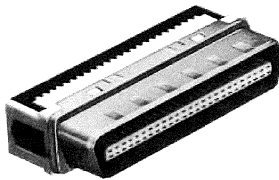
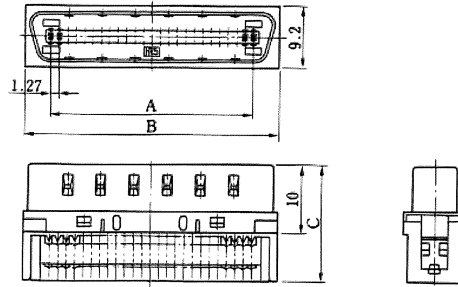
Unit: mm

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

## 1.2 IDC Plug Connector DX31, DX31A-※※P (50) (Discrete Wire Laminated)



DX31-50P(50)



DX31A-50P(50)

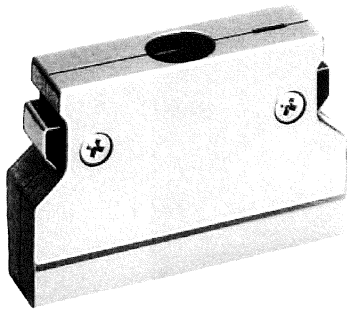
Unit: mm

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

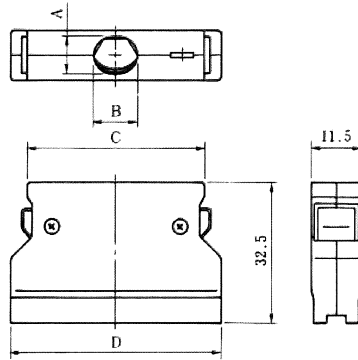
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## 2. Shell

### 2.1 DX-※※-CV (One Touch Lock)



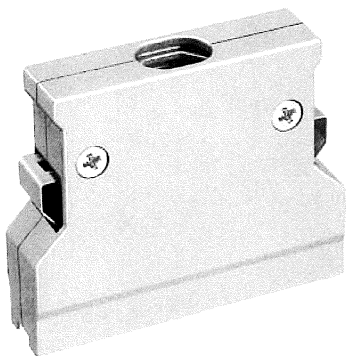
DX-50-CV



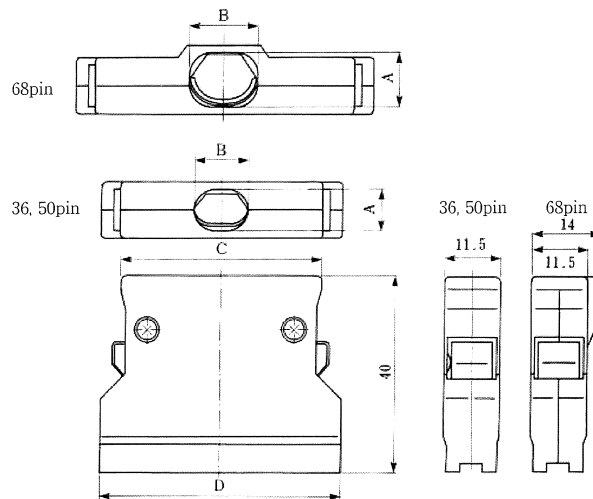
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D	RoHS
CL230-0036-6	20	DX-20-CV	φ 6.7	φ 6.7	22.3	30.0	YES
CL230-0037-9	28	DX-28-CV	φ 7.5	φ 7.5	27.38	35.08	
CL230-0038-1	36	DX-36-CV	φ 8.7	φ 8.7	32.46	40.16	
CL230-0039-4	50	DX-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)



DX-50-CV4



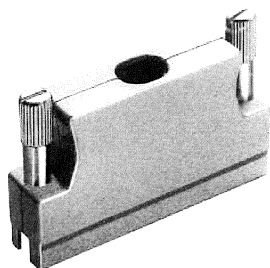
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D	RoHS
CL230-0226-1	36	DX-36-CV4	8.5	11	32.46	40.16	YES
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	

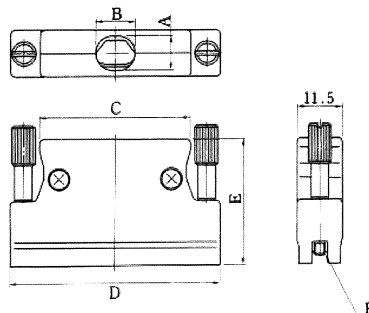


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## 2.3 DX-※※-CV1 (Screw Lock)



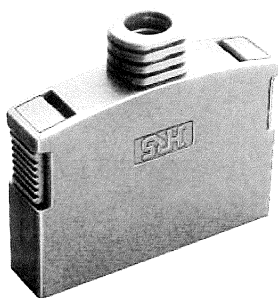
DX-68-CV1



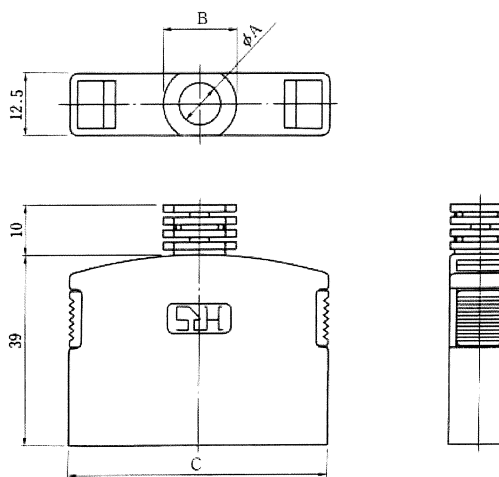
Unit: mm

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

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



DX-50-CV3



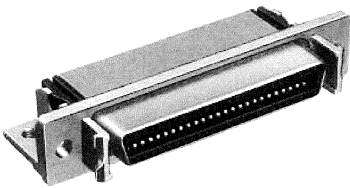
Unit: mm

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

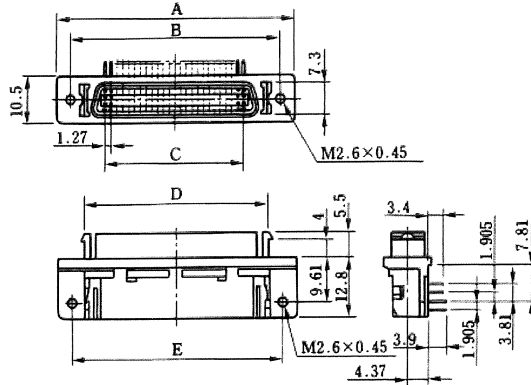
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### 3. Receptacle

#### 2.1 DX10-※※-S (50) (Right Angle Dip, One Touch Lock)



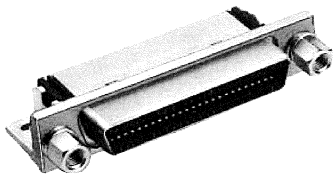
DX10-50S(50)



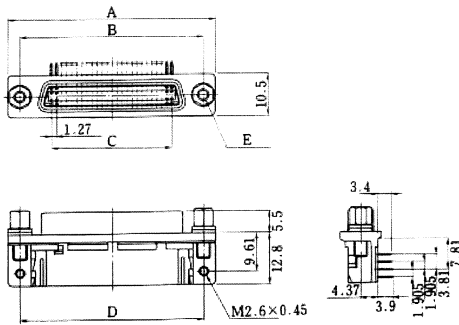
Unit: mm

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

#### 3.2 DX10A-※※-S (50) (Right Angle Dip, Screw Lock)



DX10A-50S(50)



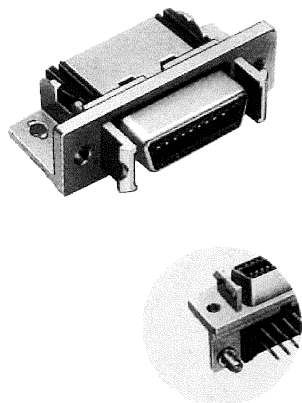
Panel Thickness	No. of Washer
t=0.7~1.0	Each 2 pieces
t=1.5~1.8	Each 1 piece

Unit: mm

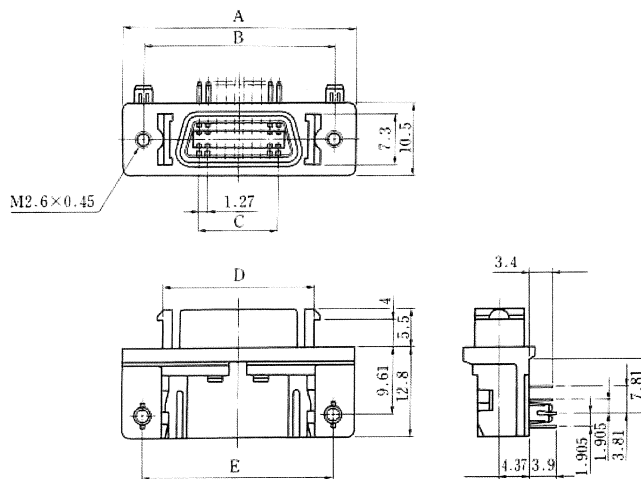
HRS No.	No. of Pin	Part No.	A	B	C	D	E	RoHS
CL230-0047-2-50	20	DX10A-20S(50)	33.4	27.4	11.43	27.4	M3×0.5	YES
CL230-0048-5-50	28	DX10A-28S(50)	38.48	32.48	16.51	32.48	M3×0.5	
CL230-0049-8-50	36	DX10A-36S(50)	43.56	37.56	21.59	37.56	M3×0.5	
CL230-0050-7-50	50	DX10A-50S(50)	52.45	46.45	30.48	46.45	M3×0.5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

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### 3.3 DX10-※※-SE (50) (Right Angle Dip, One Touch Lock, Lock Pin)



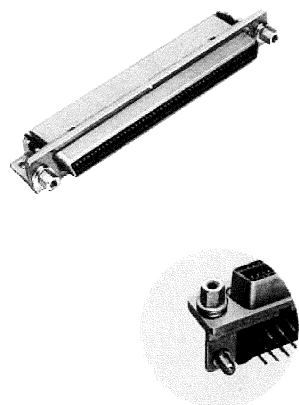
DX10-20SE(50)



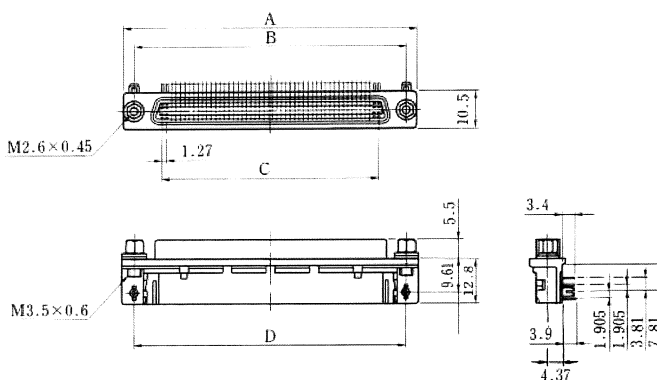
Unit: mm

HRS No.	No. of Pins	Part No.	A	B	C	D	E	RoHS
CL230-0274-4-50	20	DX10-20SE(50)	33.4	27.4	11.43	21.6	27.4	YES

### 3.4 DX10A-※※-SE (50) (Right Angle Dip, Screw Lock, Lock Pin)



DX10A-100SE(50)

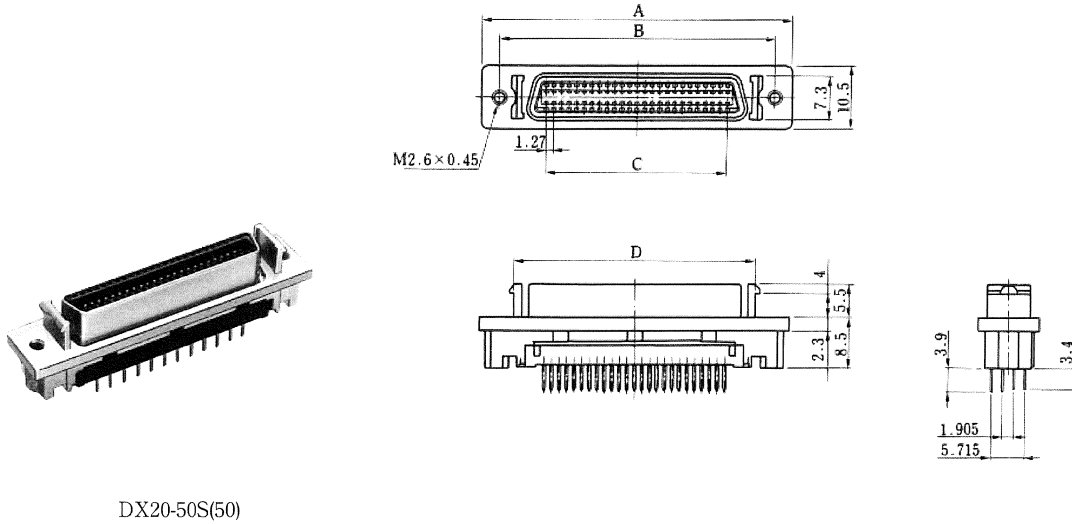


Unit: mm

HRS No.	No. of Pins	Part No.	A	B	C	D	E	RoHS
CL230-0262-5-50	100	DX10A-100SE(50)	84.2	78.2	62.23	78.2	78.2	YES

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### 3.5 DX20-※※-S (50) (Straight Dip, One Touch Lock)

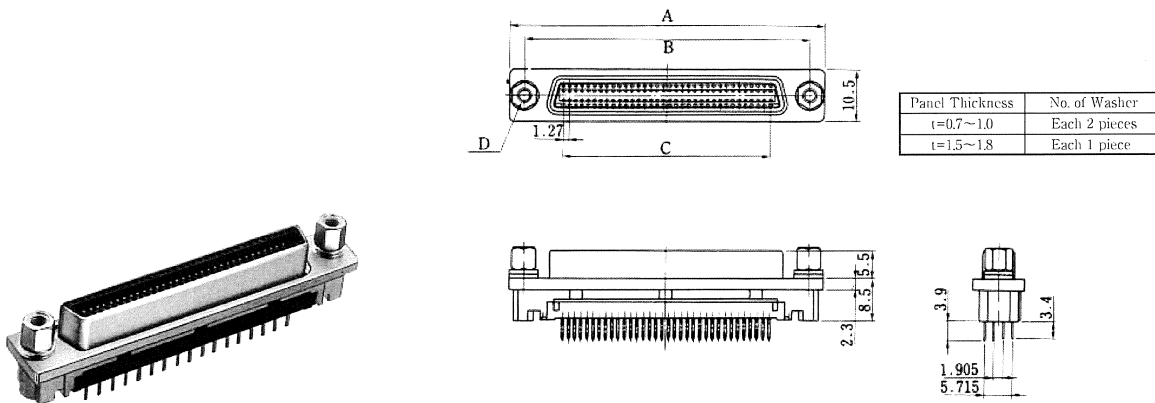


DX20-50S(50)

Unit: mm

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

### 3.6 DX20A-※※-S (50) (Straight Dip, Screw Lock)



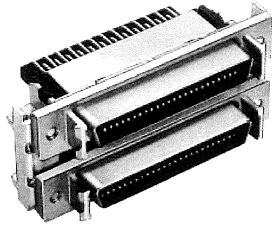
DX20A-68S(50)

Unit: mm

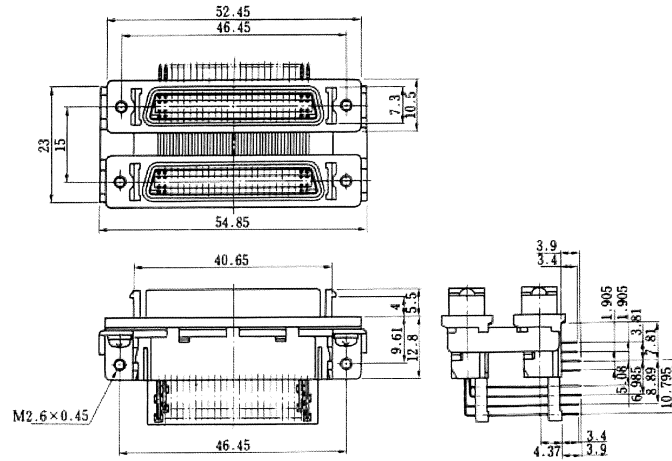
HRS No.	No. of Pin	Part No.	A	B	C	E	RoHS
CL230-0156-8-50	36	DX20A-36S(50)	43.56	37.56	21.59	M3×0.5	
CL230-0272-9-50	50	DX20A-50S(50)	52.45	46.45	30.48	M3×0.5	YES
CL230-0144-9-50	68	DX20A-68S(50)	63.88	57.88	41.91	M3×0.5	
CL230-0084-9-50	100	DX20A-100S(50)	84.2	78.2	62.23	M2.6×0.45	

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



DX10-50SW (50)

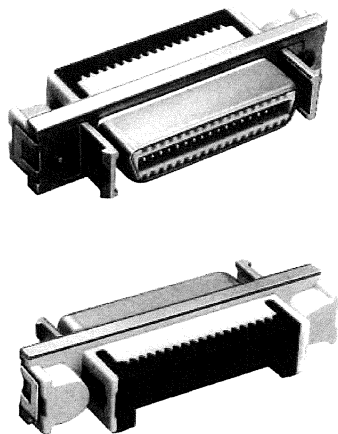


Unit: mm

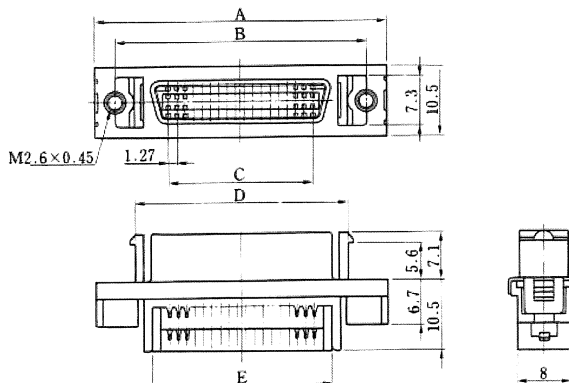
HRS No.	Part No.	RoHS
CL230-0069-5-50	DX10-50SW (50)	YES

## 4. Panel mount Cable to Cable Connector

### 4.1 DX30A-※※-S (50) (Discrete Wire, Thin Cable, One Touch Lock)



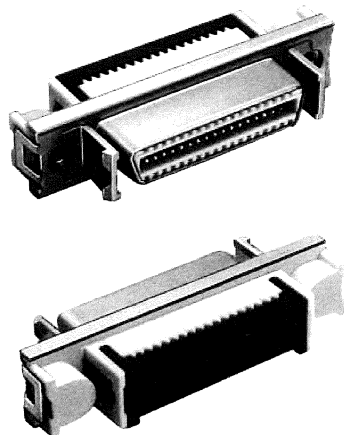
DX30A-36S(50)



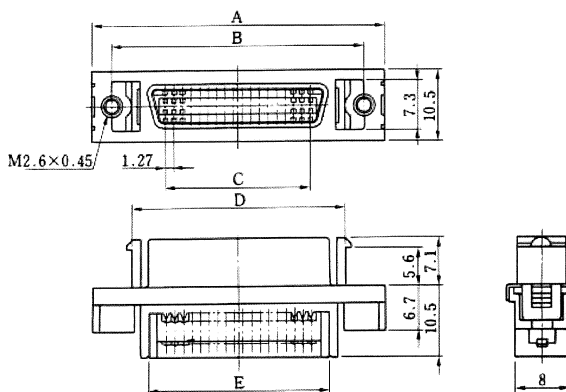
Unit: mm

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

### 4.2 DX31A-※※-S (50) (Discrete Wire Laminated, Fine Cable, One Touch Lock)



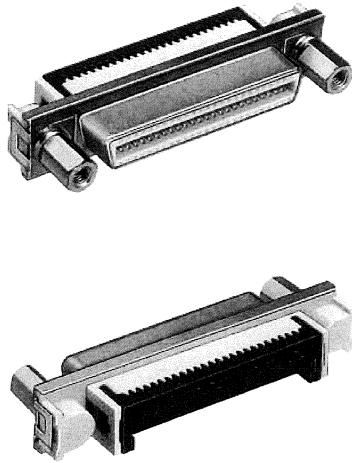
DX31A-36S(50)



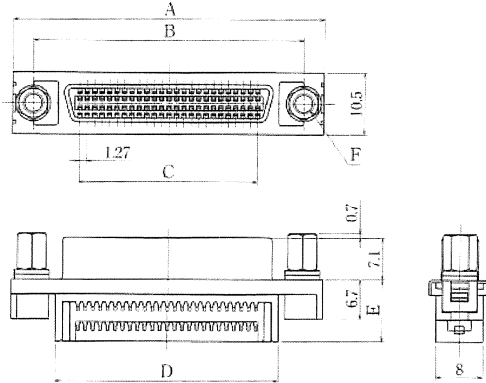
Unit: mm

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

### 4.3 DX30A-※※S-LNA (5※) (Discrete Thin Wire, Screw Lock)



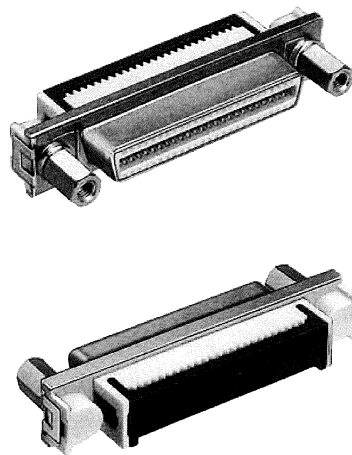
DX30A-50S-LNA(55)



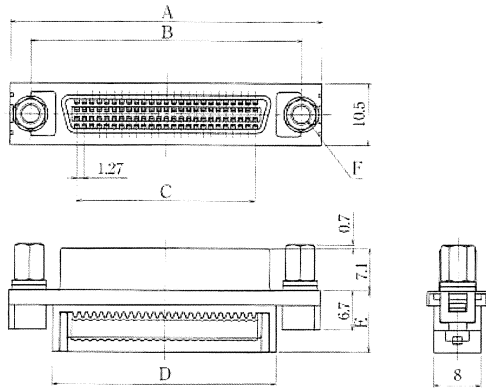
Unit: mm

HRS No.	No. of Pts.	Part No.	A	B	C	D	E	F	RoHS
CL230-0167-4-55	36	DX30A-36S-LNA(55)	44.56	37.56	21.59	29.34	10.5	M3×0.5	YES
CL230-0189-7-55	50	DX30A-50S-LNA(55)	53.45	46.45	30.48	38.23	10.5	M3×0.5	YES
CL230-0168-7-50	100	DX30A-100S-LNA(50)	86.82	78.2	62.23	69.98	11.5	M2.6×0.45	

### 4.4 DX31A-※※S-LNA (5※) (Discrete Wire Laminated, Screw Lock)



DX31A-50S-LNA(55)

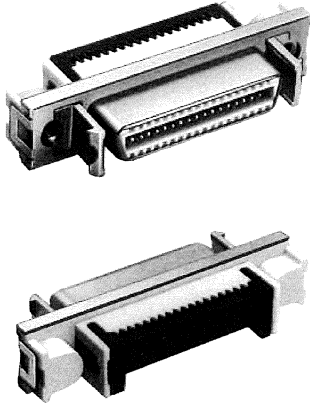


Unit: mm

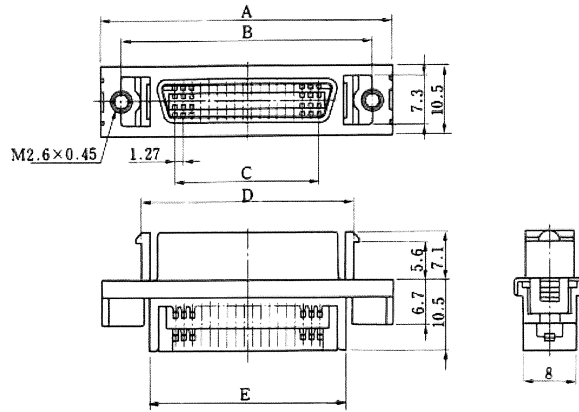
HRS No.	No. of Pts.	Part No.	A	B	C	D	E	F	RoHS
CL230-0217-0-55	36	DX31A-36S-LNA(55)	44.56	37.56	21.59	29.34	10.5	M3×0.5	YES
CL230-0193-4-55	50	DX31A-50S-LNA(55)	53.45	46.45	30.48	38.23	10.5	M3×0.5	YES
CL230-0086-4-50	100	DX31A-100S-LNA(50)	86.82	78.2	62.23	69.98	11.5	M2.6×0.45	

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### 4.5 DX32A-※※-S (50) (Discrete Wire Laminated, Ribbon Cable, One Touch Lock)



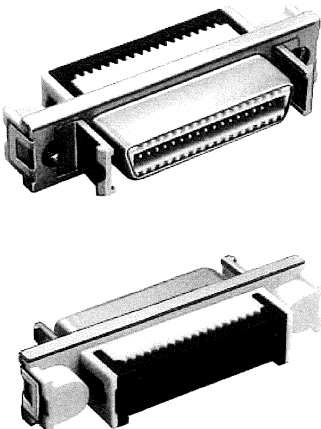
DX32A-36S(50)



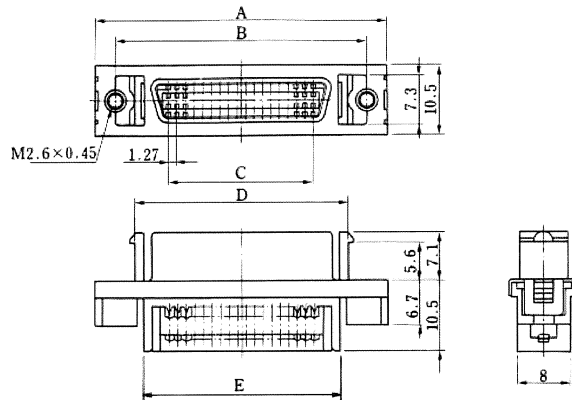
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D	E	RoHS
CL230-0195-0-50	36	DX32A-36S(50)	44.56	37.56	21.59	31.76	29.34	YES

### 4.6 DX33A-※※-S (50) (Group IDC, Flat Ribbon Cable, One Touch Lock)



DX33A-36S



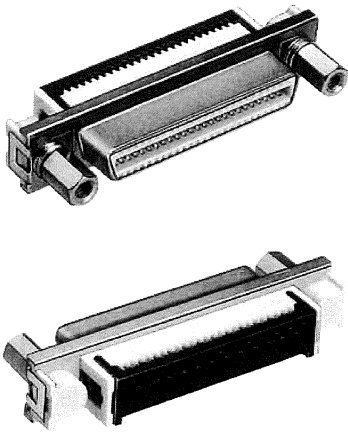
Unit: mm

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

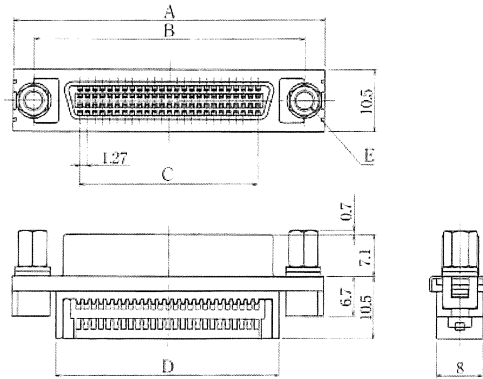


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### 4.7 DX32A-※※S-LNA (55) (Loose Piece IDC, Slit Ribbon Cable, Screw Lock)



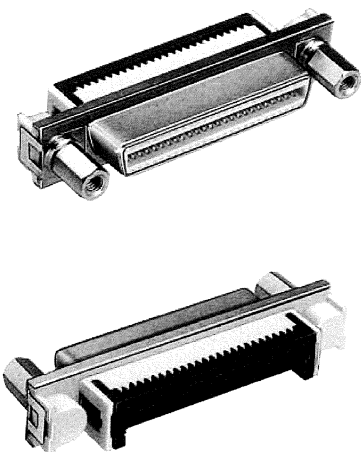
DX32A-50S-LNA(55)



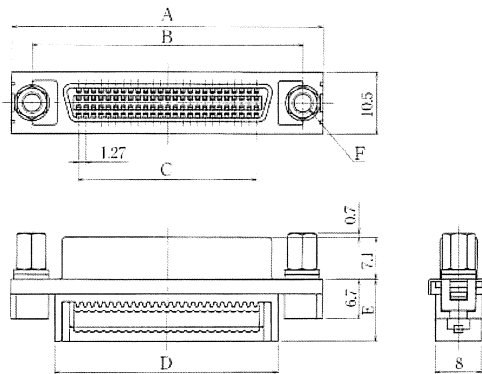
Unit: mm

HRS No.	No. of Pts	Part No.	A	B	C	D	E	RoHS
CL230-0199-0-55	50	DX32A-50S-LNA(55)	53.45	46.45	30.48	38.23	M3×0.5	YES

### 4.8 DX33A-※※S-LNA (5※) (Group IDC, Flat Ribbon Cable, Screw Lock)



DX33A-50S-LNA(55)



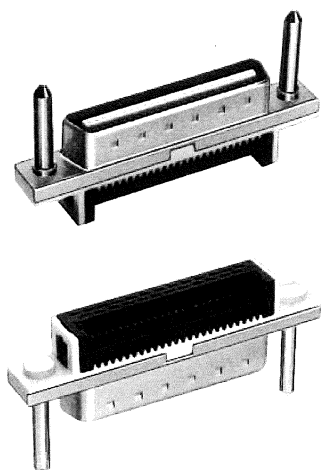
Unit: mm

HRS No.	No. of Pts	Part No.	A	B	C	D	E	RoHS
CL230-0206-4-55	50	DX33A-50S-LNA(55)	53.45	46.45	30.48	38.23	10.5	M3×0.5
CL230-0171-1-50	100	DX33A-100S-LNA(50)	86.82	78.2	62.23	69.98	11.5	M2.6×0.45

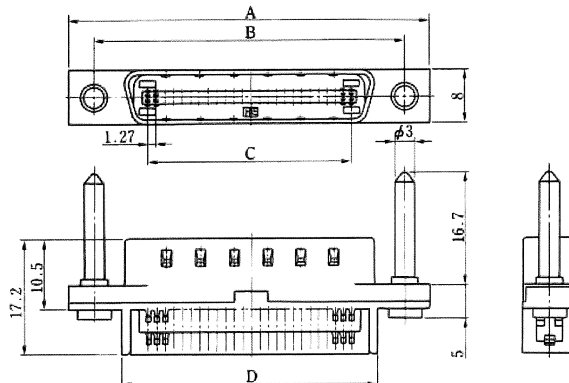
The product information in this catalog is for reference only. Please request the Engineering Drawing for the most current and accurate design information.  
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## 5. Plug In Connector

### 5.1 DX30A-※※P-PG (50) (Discrete Thin Wire)



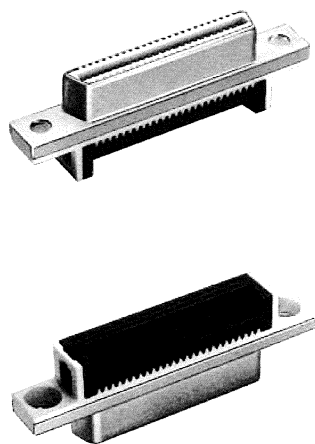
DX30A-50P-PG(50)



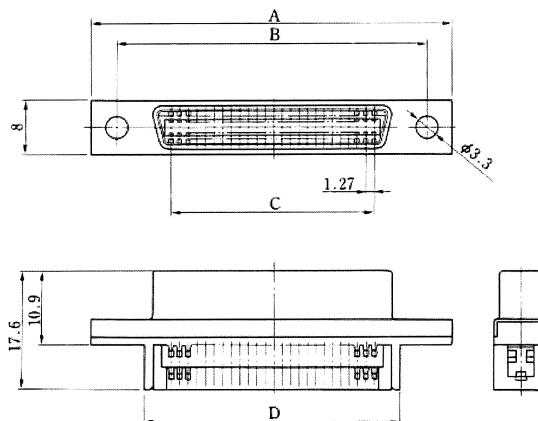
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	D	RoHS
CL230-0061-3-50	28	DX30A-28P-PG(50)	40.0	32.48	16.51	24.26	
CL230-0135-8-50	36	DX30A-36P-PG(50)	45.08	37.56	21.50	29.34	YES
CL230-0152-7-50	50	DX30A-50P-PG(50)	53.97	46.45	30.48	38.23	

### 5.2 DX30A-※※S-SG (50) (Discrete Thin Wire)



DX30A-50S-SG(50)

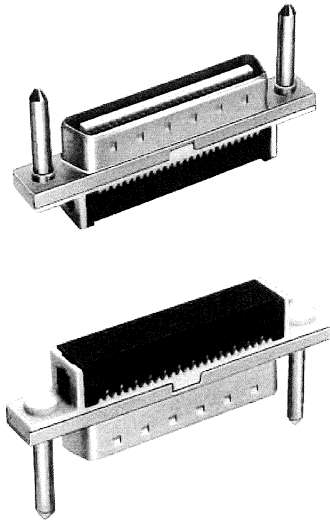


Unit: mm

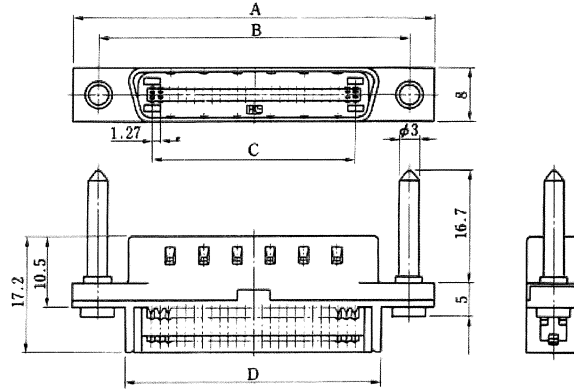
HRS No.	No. of Pin	Part No.	A	B	C	D	RoHS
CL230-0062-6-50	28	DX30A-28S-SG(50)	40.0	32.48	16.51	24.26	
CL230-0153-0-50	50	DX30A-50S-SG(50)	53.97	46.45	30.48	38.23	YES

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### 5.3 DX31A-※※P-PG (50) (Discrete WireLaminated)



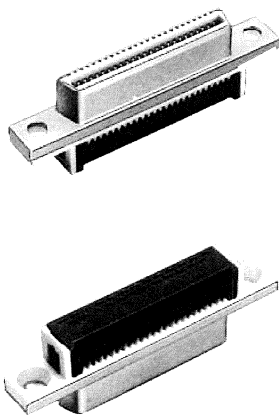
DX31A-50P-PG(50)



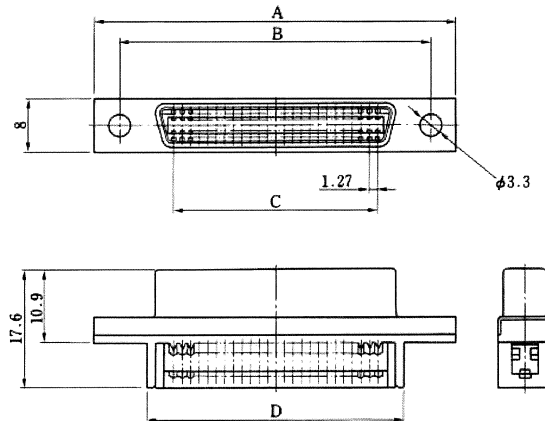
Unit: mm

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

### 5.4 DX31A-※※S-SG (50) (Discrete Wire Laminated)



DX31A-50S-SG(50)



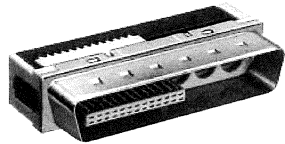
Unit: mm

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

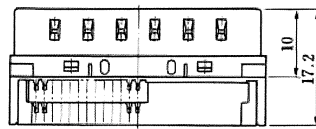
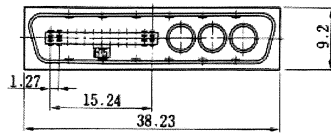
The product information in this catalog is for reference only. Please request the Engineering Drawing for the most current and accurate design information.  
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## 7. Co-axial Connector

### 7.1 Co-axial, Signal Terminal Connector



DX30AJ-26P-CP3(50)



Applicable coaxial contact

CL313-0351-6-40

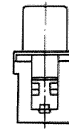
MJ-P-1.5CV (P) (40)

Applicable Cable

Sumitomo Electric Industrial Co., Ltd.

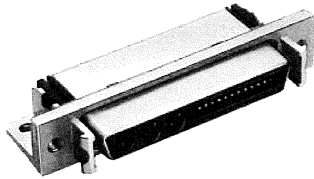
UL20121 (80°C, 30V)

Complex 29 pins cable with double shield  
(Light Beige)

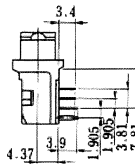
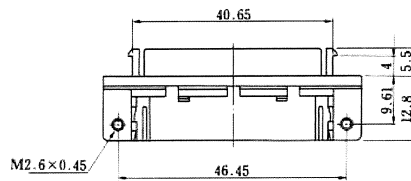
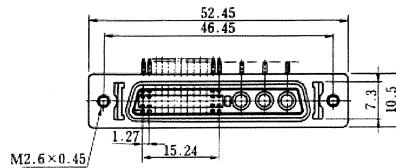


Unit: mm

HRS No.	Part No.	RoHS
CL230-0118-0-50	DX30AJ-26P-CP3(50)	YES

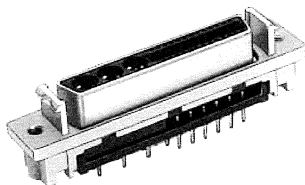


DX10J-26S-CR3(50)

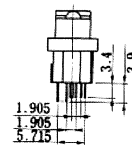
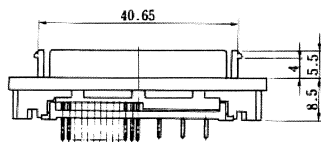
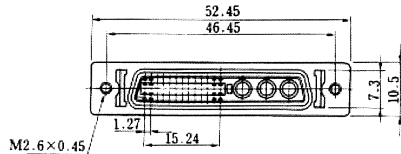


Unit: mm

HRS No.	Part No.	RoHS
CL230-0063-0-50	DX10J-26S-CR3(50)	YES



DX20J-26S-CR3(50)

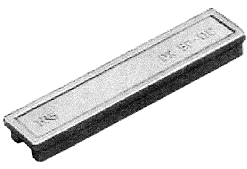


Unit: mm

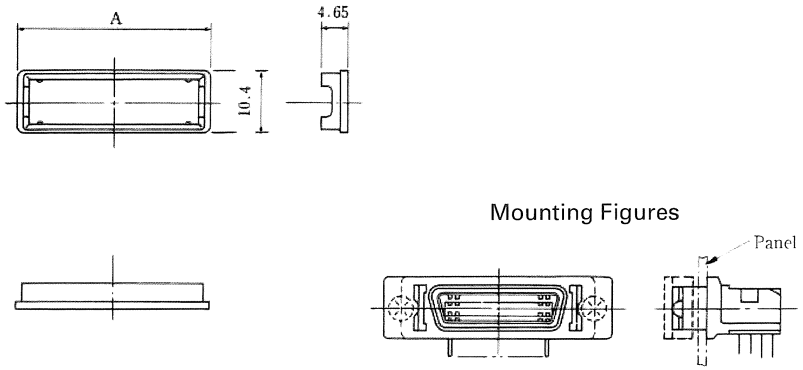
HRS No.	Part No.	RoHS
CL230-0064-1-50	DX20J-26S-CR3(50)	YES

## 9. Dust Cap

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



DX-50-DC

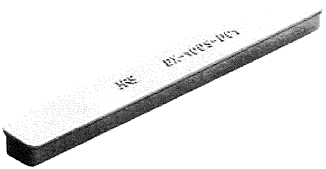


Mounting Figures

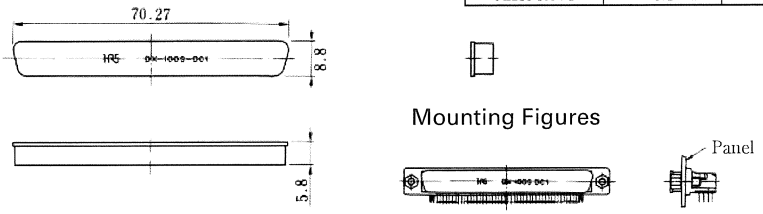
HRS No.	No. of Pin	Part No.	A	RoHS
CL230-0103-1	20	DX-20-DC	27.35	YES
CL230-0045-7	28	DX-28-DC	32.43	
CL230-0241-5	36	DX-36-DC	37.5	
CL230-0104-1	50	DX-50-DC	46.4	
CL230-0078-6	68	DX-68-DC	57.83	
CL230-0046-0	80	DX-80-DC	65.45	

Unit: mm

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



DX-100S-DC1

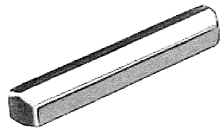


Mounting Figures

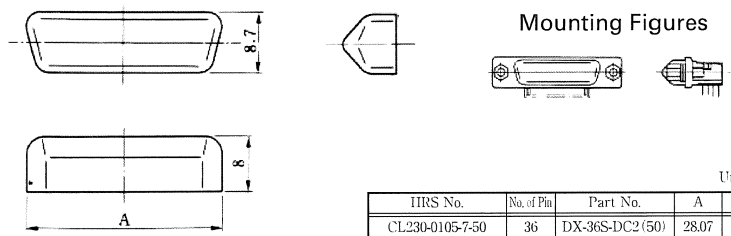
HRS No.	Part No.	RoHS
CL230-0114-8	DX-100S-DC1	YES

Unit: mm

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



DX-36S-DC2(50)



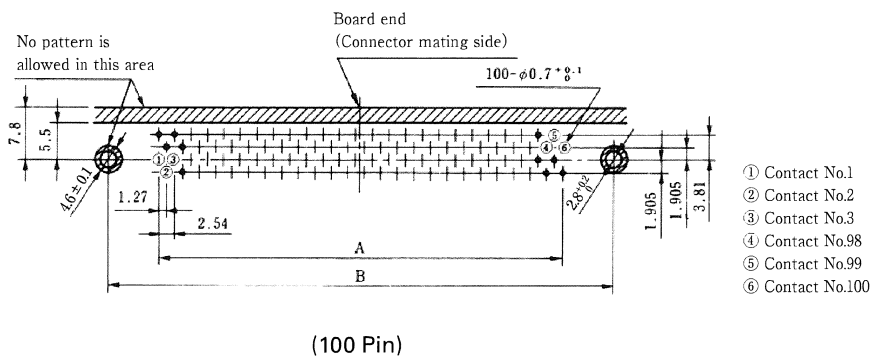
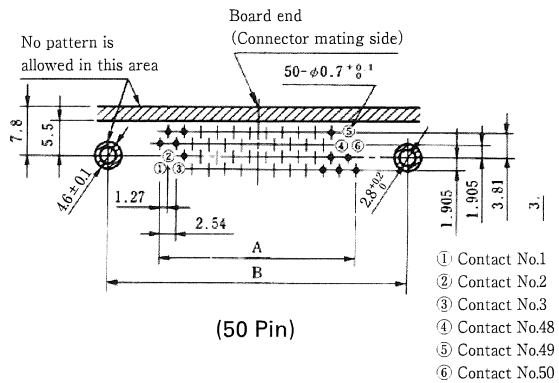
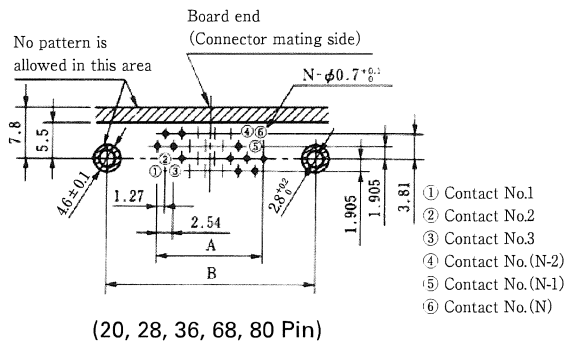
Mounting Figures

HRS No.	No. of Pin	Part No.	A	RoHS
CL230-0105-7-50	36	DX-36S-DC2(50)	28.07	YES
CL230-0264-0-50	50	DX-50S-DC2(50)	36.96	
CL230-0106-0-50	68	DX-68S-DC2(50)	48.39	

Unit: mm

# PC Board Layout (Recommended board thickness : 1.6mm)

## DX10, DX10A-※※S (50)



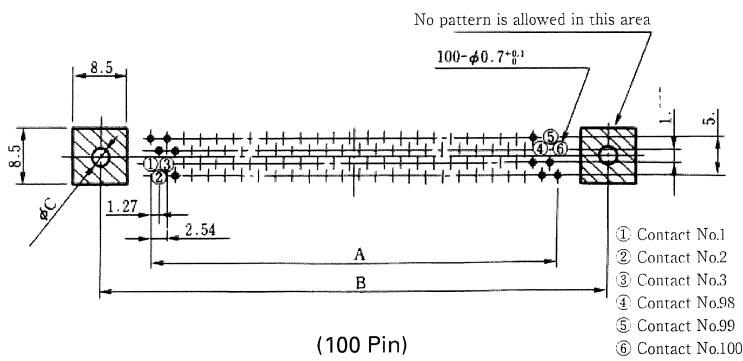
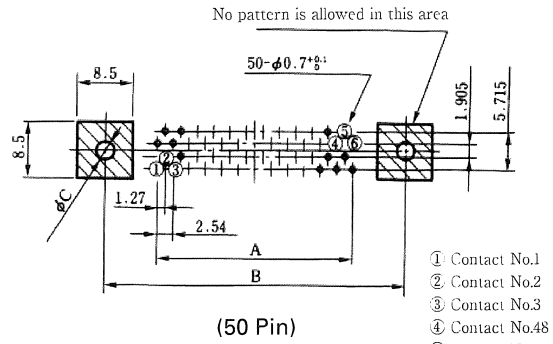
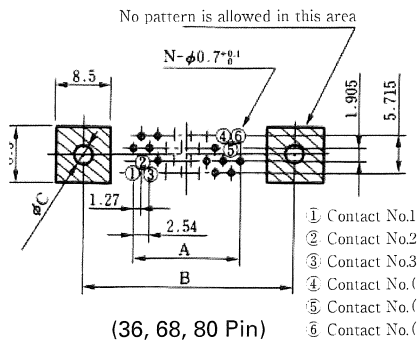
HRS No.	No. of Pin	Part No.	A	B
CL230-0001-1-50	20	DX10-20S (50)	11.43	27.4
CL230-0047-2-50		DX10A-20S (50)		
CL230-0002-4-50	28	DX10-28S (50)	16.51	32.48
CL230-0048-5-50		DX10A-28S (50)		
CL230-0003-7-50	36	DX10-36S (50)	21.59	37.56
CL230-0049-8-50		DX10A-36S (50)		
CL230-0004-0-50	50	DX10-50S (50)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

Unit: mm

HRS No.	No. of Pin	Part No.	A	B
CL230-0005-2-50	68	DX10-68S (50)	41.91	57.88
CL230-0051-0-50		DX10A-68S (50)		
CL230-0006-5-50	80	DX10-80S (50)	49.53	65.5
CL230-0052-2-50		DX10A-80S (50)		
CL230-0043-1-50	100	DX10A-100S (50)	62.23	78.2

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### DX20, DX20A-※※S (50)

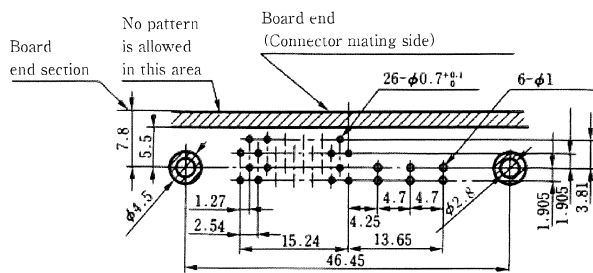


Unit: mm

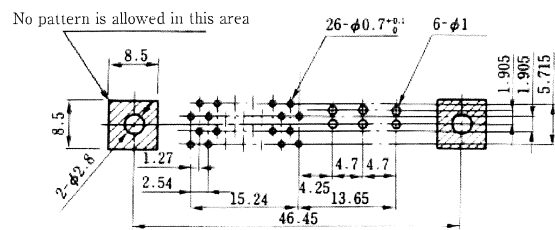
HRS No.	No. of Pin	Part No.	A	B	C
CL230-0081-0-50	36	DX20-36S(50)	21.59	37.56	2.8
CL230-0068-2-50	50	DX20-50S(50)	30.48	46.45	2.8
CL230-0144-9-50	68	DX20A-68S(50)	41.91	57.88	3.7
CL230-0083-6-50	80	DX20-80S(50)	49.53	65.5	3.7
CL230-0084-9-50	100	DX20A-100S(50)	62.23	78.2	3.7

### Coaxial-Connector

#### DX10J-26S CR3 (50)



#### DX20J-26S CR3 (50)

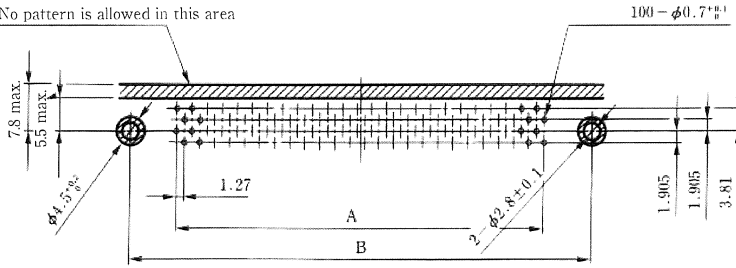


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### DX10, DX10A-※SE(50)

No pattern is allowed in this area



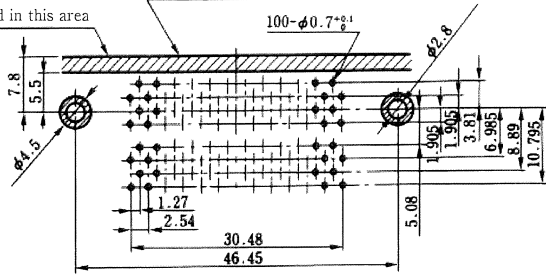
Unit: mm

HRS No.	No. of Pin	Part No.	A	B
CL230-0274-4-50	20	DX10-20SE(50)	11.43	27.4
CL230-0262-5-50	100	DX10A-100SE(50)	62.23	78.2

### DX10-50SW (50)

No pattern is allowed in this area

Board end (Connector mating side)

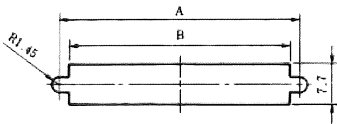




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## Panel-Fitting Dimensional Drawing (Recommended panel thickness :

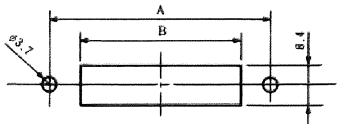
### One-Touch Lock Type



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

Unit: mm

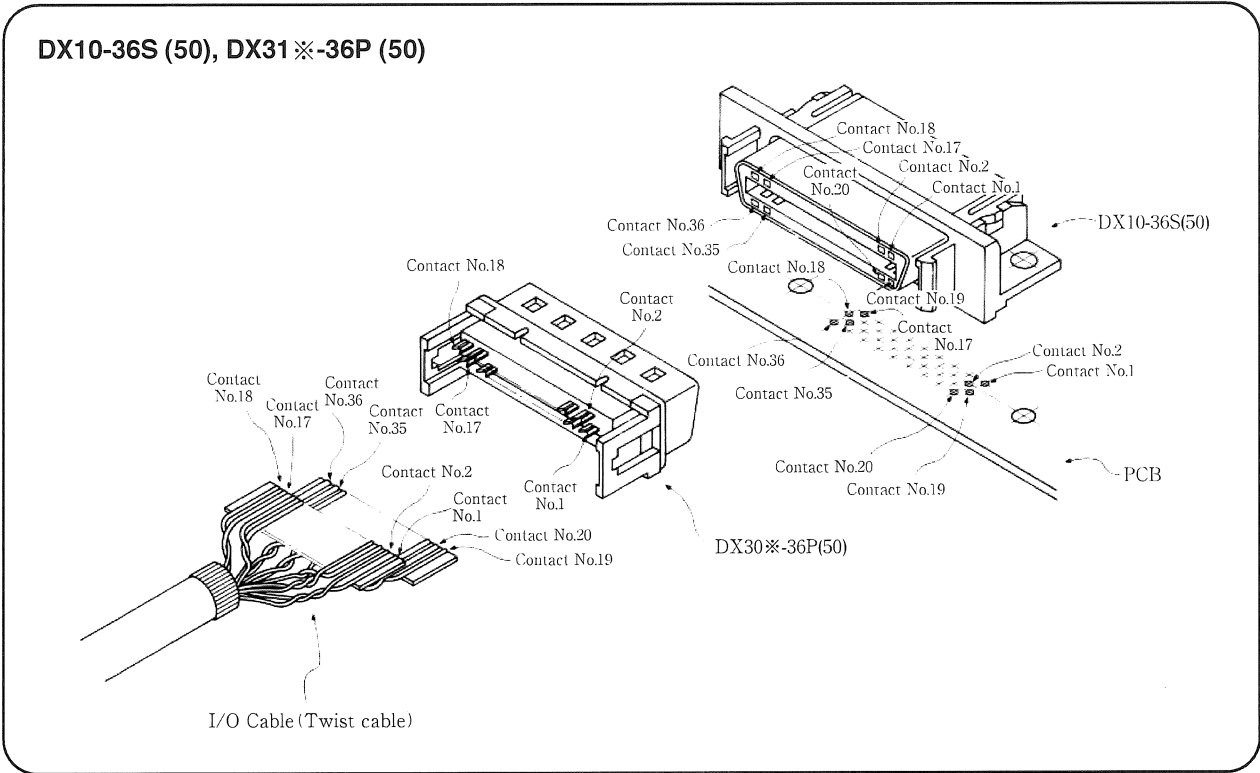
### Screw Lock Type



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

Unit: mm

## DX Connector Distribution Diagram

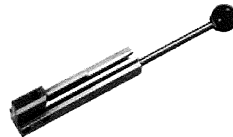


## Connecting Method (for Discrete Cable)

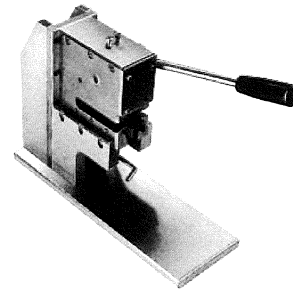
### ● Connecting Tools



DX30 Cable Distribution Jig

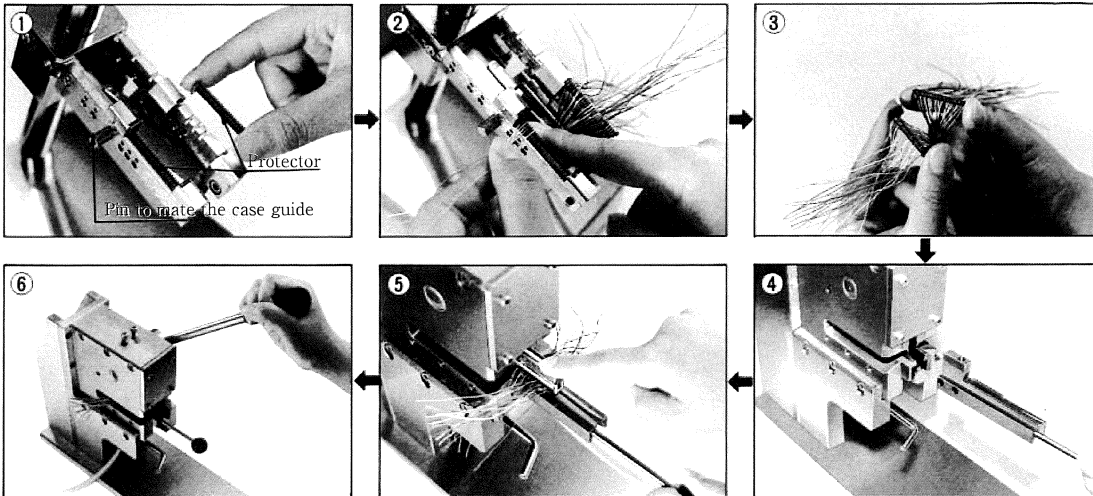


Guide Plate  
DX30-\*\*GP  
\*\*(20, 28, 36, 50, 68, 80)



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 Discrete Cable)

### ● Connecting Tools

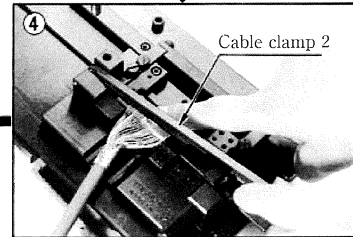
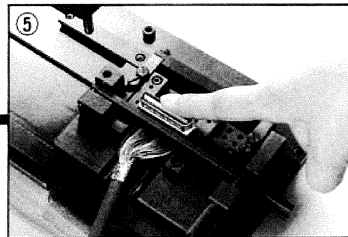
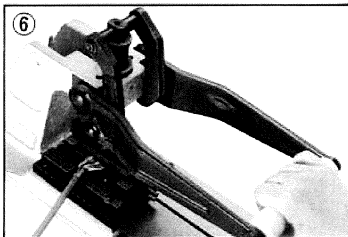
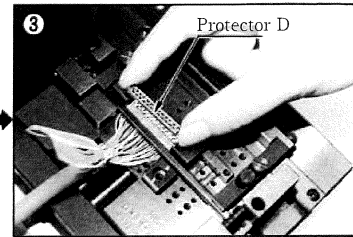
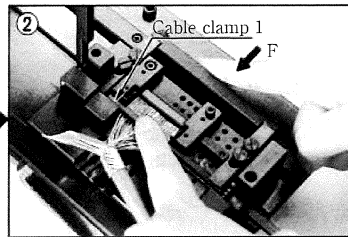
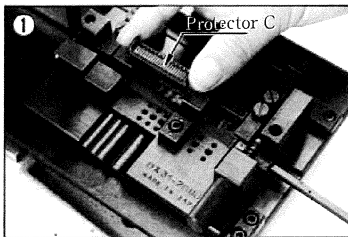


Connecting Press  
Hi-Flex Connecting Press



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. Plate the connector body over the protector.
6. Shift the side base to the position to crimp and depress the handle. (With this the connection has been completed)

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## 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 (50) DX30A-20P (50)	By hand DX30 Cable distribution JIG CL902-0116-1	Connecting press DX30-HP CL902-0117-4	DX30-20GP CL902-0118-7
	DX30-28P (50) DX30A-28P (50)			DX30-26GP CL902-0119-0
	DX30-36P (50) DX30A-36P (50)			DX30-36GP CL902-0120-9
	DX30-50P (50) DX30A-50P (50)			DX30-50GP CL902-0121-1
	DX30-68P (50) DX30A-68P (50)			DX30-68GP CL902-0122-4
	DX30-80P (50) DX30A-80P (50)			DX30-80GP CL902-0123-7
	DX30-100P (50) DX30A-100P (50)			DX30-100GP CL902-2031-1
	I/O Cable (1.27mm pitch fusion welding cable)			DX31-20P (50) DX31A-20P (50)
DX31-28P (50) DX31A-28P (50)				
DX31-36P (50) DX31A-36P (50)				
DX31-50P (50) DX31A-50P (50)				
DX31-68P (50) DX31A-68P (50)				
DX31-80P (50) DX31A-80P (50)				
DX31-100P (50) DX31A-100P (50)		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 (50)	By hand DX30 Cable distribution JIG CL902-0116-1	DX30-HP CL902-0229-8	DX30-20SGP CL902-0292-4
	DX30A-36S (50) DX32A-36S (50)			DX30-36SGP CL902-0234-8
	DX30A-50S (50) DX30A-50S-LNA (55) DX32A-50S-LNA (55)			DX30-50SGP CL902-0235-0
	DX30A-100S-LNA (50)			DX30-100SGP CL902-0230-7
	DX31A-20S (50)			_____
DX31A-36S (50) DX31A-36S-LNA (55)				
DX33A-36S (50)				
DX31A-50S (50) DX31A-50S-LNA (55) DX33A-50S (50) DX33A-50S-LNA (55)				
DX31A-100S-LNA (50) DX33A-100S-LNA (50)	DX31-100SGPA CL902-0246-7 (100pin private) (Comes with pressure block)			

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

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### Plug in Connector

Cable	Connector Name	Wire Configuration	Crimping		Remaining part cutting	
			Press	Unit	Press	Unit
I/O Cable (Discrete wire)	DX30A-28P-PG (50)	By hand DX30 Cable distribution JIG CL902-0116-1	DX30AM-HP1 CL902-0210-0	DX30A-PG-GPT	DX30AM-HP1 CL902-0210-0	DX30A-PSG-C
	DX30A-36P-PG (50)			DX30A-SG-GPT		
	DX30A-50P-PG (50)					
	DX30A-28S-SG (50)					
	DX30A-50S-SG (50)					
Cable	Connector Name	Wire Configuration	Crimping			
			Press	Guide plate	Pressure block	
I/O Cable (1.27mm pitch fusion welding cable)	DX31A-28P-PG (50)	_____	Hi-Flex Connecting press HHP-502 CL550-0082-2	DX31-PSG-GPA CL902-2024-6	DX31A-PG-PB CL902-2025-9	
	DX31A-50P-PG (50)				DX31A-SG-PB CL902-2026-1	
	DX31A-28S-SG (50)					
	DX31A-36S-SG (50)					
	DX31A-50S-SG (50)					

### 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 (50)	MJ-P-1.5CV (P) (40)	CM-105	AP-105-MJ-1.5CV	MJ-P-1.5CV (P)-CCT (01)	DX30J-CAT (01)	DX30-HP	DX30J-26GP	DX30J-CCT (01)	DX30J-HPT
			CL901-0005-4	CL901-3001-0			CL902-0117-4	_____		