

# 1300 SERIES RECTANGULAR CONNECTORS

## Introduction

MINICON 1300 series is a collection of small, rectangular, multi-contact connectors which HIROSE has developed in order to meet the most stringent demands of high performance and small size equipment manufacturing. The number of contacts available are 8, 12, 16, 20, 24, 28, 34, 45, and 60. Connector inserts

(soldering, crimping, and wire wrapping) along with various accessories are available for a wide range of applications. The plug shell has a rugged push-button lock mechanism to ensure reliable connection. These connectors conform to NTT specifications (SPEC NO.1931).

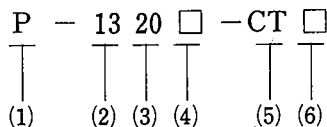
## Electrical and Environmental Characteristics

Item	Standard
Contact resistance	5mΩ Max
Current rating	5A
Voltage rating	AC400V
Insulation resistance	1000MΩ min at DC500V
Withstand voltage	AC1200V for 1 minute

## Material and Finish

Description	Material	Finish
Molding	Epoxywith	1 light-green colour
Pin contact	Brass	Silver plated
Socket contact	Phosphor bronze	Silver plated
Plug shell	Zinc alloy die cast	Black baked finish (MTT spec:2.5P B6/2 baked finish)
Stopper bracket	Mild steel	
Handle	Mild steel	Bichromic acid treatment

## Ordering Information



(1) Shape of terminal opening

P: Male contact  
S: Female contact

(2) Series name  
13: 1300 series

(3) Number of contacts

(4) Termination

No sign : Soldering  
W : Wrapping (signs for sub-groups of "wrapping" are suffixed to W, see tables)

(5) Accessories

CT: Plug case with vertical cable inlet opening

CE: Plug case with horizontal cable inlet opening

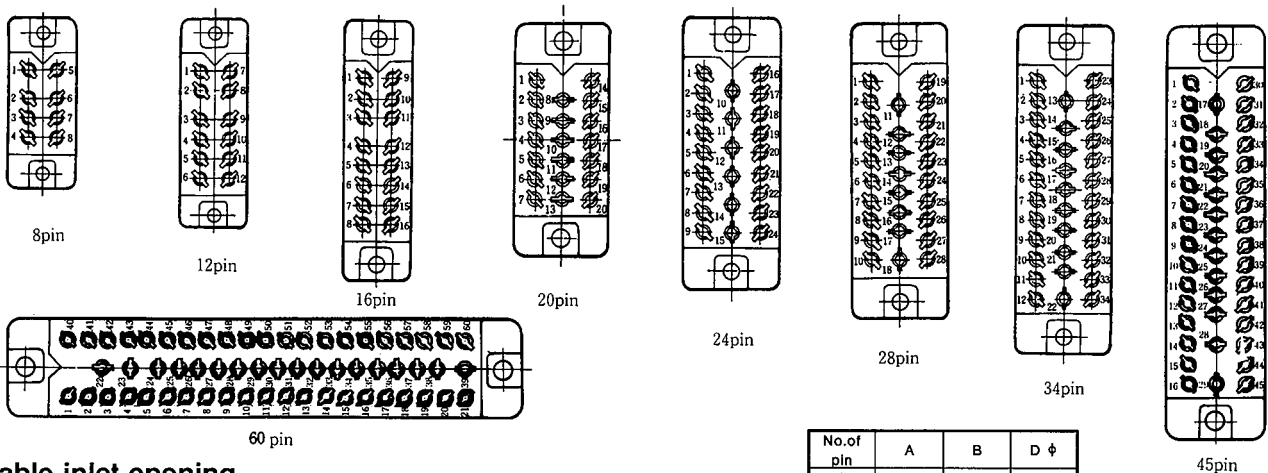
SB: Stopper bracket

H: Handle

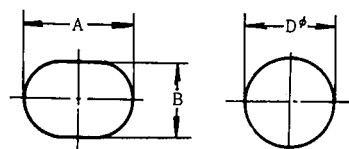
(6) Serial signs for accessories

## Contact Arrangements

Figures show connectors viewed from the surface of sockets, namely, the fitting side of socket connectors. Plug units are arranged symmetrically.



cable inlet opening

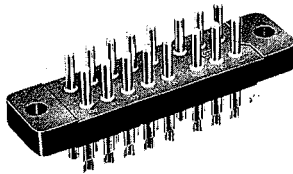


No. of pin	A	B	D φ
8			10
12	14	10	
16	17.5	10	
20	19.2	14	
24			14
28	28	14	
34	30	14	
45	27	14	
60	34	14	

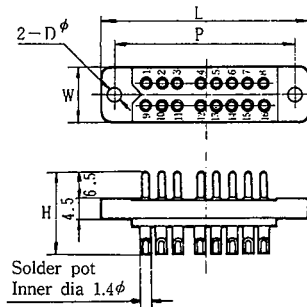
# Cross Reference to NTT NO. NTT to HRS

NTT No.	Short Form	HRS No.	page	NTT No.	Short Form	HRS No.	page
CN-1208DLPMS	8DLPMS	P-1308-CTA(02)	84	CN-4824DJMS	24DJMS	P-1324-SB(02)	84
CN-1208DWPMS	8DWPMS	P-1308-CEA(02)	85	CN-5228DLPMS	28DLPMS	P-1328-CTA(02)	84
CN-1208DJFS	8DJFS	S-1308-SB(02)	86	CN-5228DWPMS	28DWPMS	P-1328-CEA(02)	85
CN-1208DLPFS	8DLPFS	S-1308-CTA(02)	84	CN-5228DJFS	28DJFS	S-1328-SB(02)	86
CN-1208DWPFS	8DWPFS	S-1308-CEA(02)	85	CN-5226DLPFS	28DLPFS	S-1328-CTA(02)	84
CN-1208DJMS	8DJMS	P-1308-SB(02)	86	CN-5228DWPFS	28DWPFS	S-1328-CEA(02)	85
CN-3712DLPMS	12DLPMS	P-1312-CTA(02)	84	CN-5228DJMS	28DJMS	P-1328-SB(02)	86
CN-3712DWPMS	12DWPMS	P-1312-CEA(02)	85	CN-5834DLPMS	34DLPMS	P-1334-CTA(02)	84
CN-3712DJFS	12DJFS	S-1312-SB(02)	86	CN-5834DWPMS	34DWPMS	P-1334-CEA(02)	85
CN-3712DLPFS	12DLPFS	S-1312-CTA(02)	84	CN-5834DJFS	34DJFS	S-1334-SB(02)	86
CN-3712DWPFS	12DWPFS	S-1312-CEA(02)	85	CN-5834DLPFS	34DLPFS	S-1334-CTA(02)	84
CN-3712DJMS	12DJMS	P-1312-SB(02)	86	CN-5834DWPFS	34DWPFS	S-1334-CEA(02)	85
CN-4616DLPMS	16DLPMS	P-1316-CTA(02)	84	CN-5834DJMS	34DJMS	P-1334-SB(02)	86
CN-4616DWPMS	16DWPMS	P-1316-CEA(02)	85	CN-3712DWPMSN	12DWPMSN	P-1312-CEA1(02)	—
CN-4616DJFS	16DJFS	S-1316-SB(02)	86	CN-4616DWPMSN	16DWPMSN	P-1316-CEA1(02)	—
CN-4616DLPFS	16DLPFS	S-1316-CTA(02)	84	CN-4120DWPMSN	20DWPMSN	P-1320-CEA1(02)	—
CN-4616DWPFS	16DWPFS	S-1316-CEA(02)	85	CN-5228DWPMSN	28DWPMSN	P-1328-CEA1(02)	—
CN-4616DJMS	16DJMS	P-1316-SB(02)	86	CN-5834DWPMSN	34DWPMSN	P-1334-CEA1(02)	—
CN-4120DLPMS	20DLPMS	P-1320-CTA(02)	84	CN-5834DWPFSN	34DWPFSN	S-1334-CEA1(02)	—
CN-4120DWPMS	20DWPMS	P-1320-CEA(02)	85	CN-5228DWPFSN	28DWPFSN	S-1328-CEA1(02)	—
CN-4120DJFS	20DJFS	S-1320-SB(02)	86	CN-3712DM	12DM	P-1312	83
CN-4120DLPFS	20DLPFS	S-1320-CTA(02)	84	CN-3712DF	12DF	S-1312	83
CN-4120DWPFS	20DWPFS	S-1320-CEA(02)	85	CN-5834DM	34DM	P-1334B	83
CN-4120DJMS	20DJMS	P-1320-SB(02)	86	CN-5834DF	34DF	S-1334B	83
CN-4824DLPMS	24DLPMS	P-1324-CTA(02)	84	CN-7245DM	45DM	P-1345B	83
CN-4824DWPMS	24DWPMS	P-1324-CEA(02)	85	CN-7245DF	45DF	S-1345B	83
CN-4824DJFS	24DJFS	S-1324-SB(02)	86	CN-9060DM	60DM	P-1360B	83
CN-4824DLPFS	24DLPFS	S-1324-CTA(02)	84	CN-9060DF	60DF	S-1360B	83
CN-4824DWPFS	24DWPFS	S-1324-CEA(02)	85				

## Pin Insert



CL213-0003-1  
P-1316

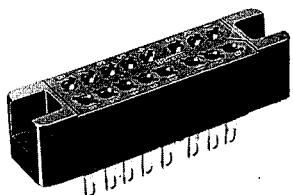


Unit: mm

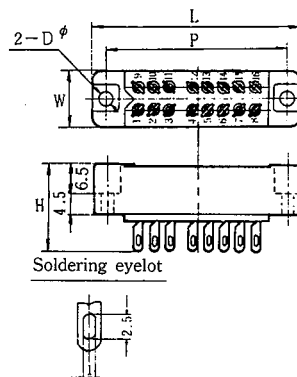
HRS No.	No. of Pin	Part No.	L	P	W	H	D φ
* CL213-0001-6-09	8	P-1308(09)	30	25	12	19	2.8
* CL213-0002-9-09	12	P-1312(09)	37	32	12	19	2.8
* CL213-0003-1-09	16	P-1316(09)	46	40	12	19	3.2
* CL213-0004-4-09	20	P-1320(09)	41	35	17	19	3.2
* CL213-0005-7-09	24	P-1324(09)	48	42	17	19	3.2
* CL213-0006-0-09	28	P-1328(09)	52	46	17	19	3.2
* CL213-0007-2-09	34	P-1334(09)	58	52	17	19	3.2
* CL213-0098-8-09	34	P-1334B(09)	58	52	17	22	3.2
* CL213-0117-0-09	45	P-1345B(09)	72	66	17	22	3.2
* CL213-0099-0-09	60	P-1360B(09)	90	84	17	22	3.2

\*: Standard

## Socket Insert



CL213-0010-7  
S-1316

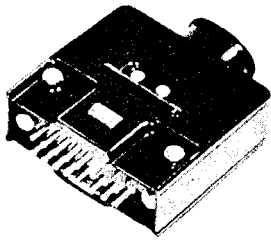


Unit: mm

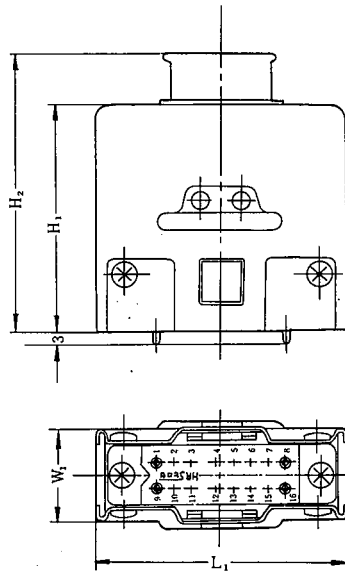
HRS No.	No. of Pin	Part No.	L	P	W	H	D φ
* CL213-0008-5-09	8	S-1308(09)	30	25	12	19	2.8
* CL213-0009-8-09	12	S-1312(09)	37	32	12	19	2.8
* CL213-0010-7-09	16	S-1316(09)	46	40	12	19	3.2
* CL213-0011-0-09	20	S-1320(09)	41	35	17	19	3.2
* CL213-0012-2-09	24	S-1324(09)	48	42	17	19	3.2
* CL213-0013-5-09	28	S-1328(09)	52	46	17	19	3.2
* CL213-0014-8-09	34	S-1334(09)	58	52	17	19	3.2
* CL213-0101-0-09	34	S-1334B(09)	58	52	17	22	3.2
* CL213-0118-3-09	45	S-1345B(09)	72	66	17	22	3.2
* CL213-0102-3-09	60	S-1360B(09)	90	84	17	22	3.2

\*: Standard

# Connectors with Lockable Case, Straight Cable-Inlet



CL213-0426-5  
P-1316-CTA

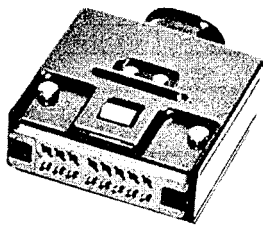


Unit: mm

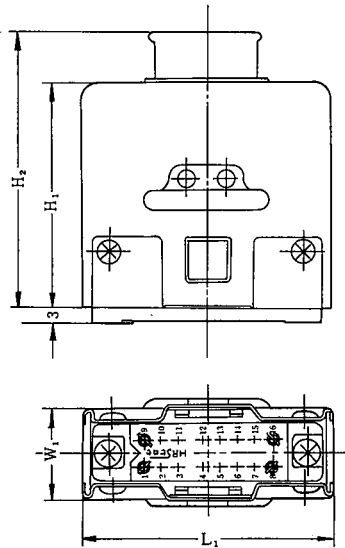
HRS No.	No. of Pln	Part No.	L <sub>1</sub>	W <sub>1</sub>	H <sub>1</sub>	H <sub>2</sub>	cable inlet
* CL213-0424-0-09	8	P-1308-CTA(09)	33.5	18.5	36	45	D φ
* CL213-0425-2-09	12	P-1312-CTA(09)	40.5	18.5	41	50	A×B
* CL213-0426-5-09	16	P-1316-CTA(09)	49.5	18.5	45	55	A×B
* CL213-0427-8-09	20	P-1320-CTA(09)	44.5	23.5	48	58	A×B
* CL213-0428-0-09	24	P-1324-CTA(09)	51.5	23.5	40	50	D φ
* CL213-0429-3-09	28	P-1328-CTA(09)	55.5	23.5	57	67	A×B
* CL213-0373-0-09	34	P-1334-CTA(09)	61.5	23.5	59	69	A×B
* CL213-0354-6-09	45	P-1345B-CTA(09)	76	23.5	56	66	A×B
* CL213-0367-8-09	60	P-1360B-CTA(09)	94	23.5	63	73	A×B

\* standard

\* see page 82 for cable inlet size.



CL213-0432-8  
S-1316-CTA



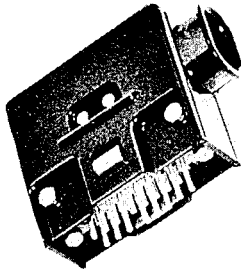
Unit: mm

HRS No.	No. of Pln	Part No.	L <sub>1</sub>	W <sub>1</sub>	H <sub>1</sub>	H <sub>2</sub>	cable inlet
* CL213-0430-2-09	8	S-1308-CTA(09)	33.5	18.5	36	45	D φ
* CL213-0431-5-09	12	S-1312-CTA(09)	40.5	18.5	41	50	A×B
* CL213-0432-8-09	16	S-1316-CTA(09)	49.5	18.5	45	55	A×B
* CL213-0433-0-09	20	S-1320-CTA(09)	44.5	23.5	48	58	A×B
* CL213-0434-3-09	24	S-1324-CTA(09)	51.5	23.5	40	50	D φ
* CL213-0435-6-09	28	S-1328-CTA(09)	55.5	23.5	57	67	A×B
* CL213-0374-3-09	34	S-1334-CTA(09)	61.5	23.5	59	69	A×B
* CL213-0355-9-09	45	S-1345B-CTA(09)	76	23.5	56	66	A×B
* CL213-0368-0-09	60	S-1360B-CTA(09)	94	23.5	63	73	A×B

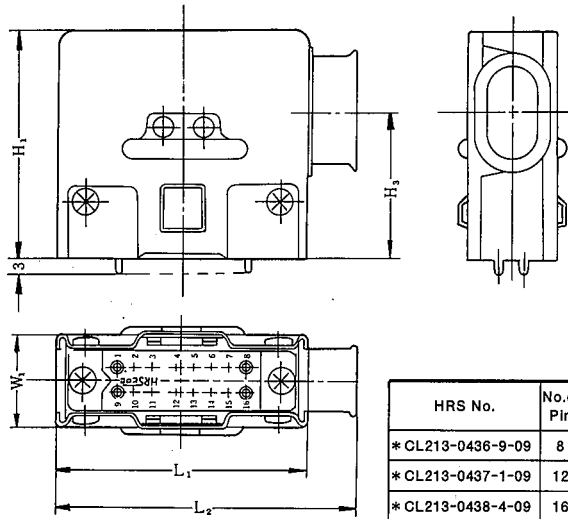
\* standard

\* see page 82 for cable inlet size.

# Side Cable-Inlet



CL213-0438-4  
P-1316-CEA

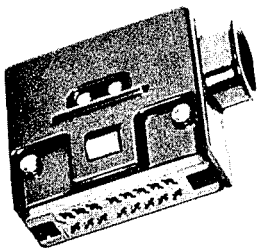


Unit: mm

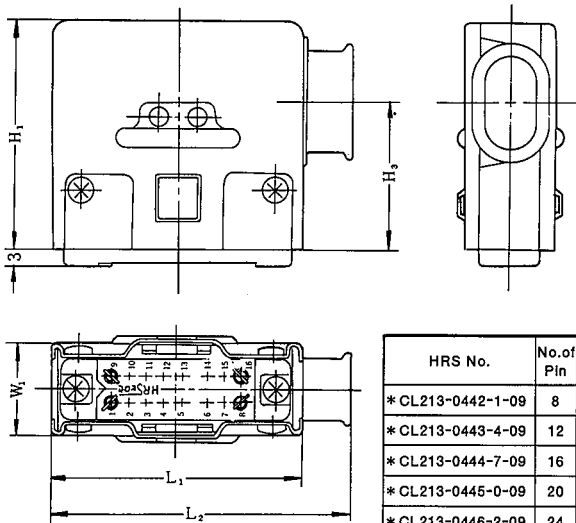
HRS No.	No. of Pin	Part No.	L <sub>1</sub>	L <sub>2</sub>	W <sub>1</sub>	H <sub>1</sub>	H <sub>3</sub>	cable Inlet *
* CL213-0436-9-09	8	P-1308-CEA(09)	33.5	42.5	18.5	36	24.5	D φ
* CL213-0437-1-09	12	P-1312-CEA(09)	40.5	49.5	18.5	41	27	A×B
* CL213-0438-4-09	16	P-1316-CEA(09)	49.5	59.5	18.5	41	29	A×B
* CL213-0439-7-09	20	P-1310-CEA(09)	44.5	54.5	23.5	48	30.5	A×B
* CL213-0440-6-09	24	P-1324-CEA(09)	51.5	61.5	23.5	40	26.5	A×B
* CL213-0441-9-09	28	P-1328-CEA(09)	55.5	65.5	23.5	57	35	A×B
* CL213-0375-6-09	34	P-1334-CEA(09)	61.5	71.5	23.5	59	36	A×B
* CL213-0356-1-09	45	P-1345B-CEA(09)	76	86	23.5	56	34.5	A×B
* CL213-0369-3-09	60	P-1360B-CEA(09)	94	104	23.5	63	38	A×B

\* standard

\* see page 82 for cable inlet size.



CL213-0444-7  
S-1316-CEA



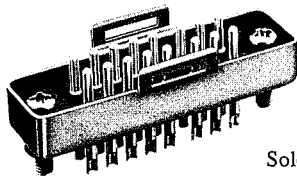
Unit: mm

HRS No.	No. of Pin	Part No.	L <sub>1</sub>	L <sub>2</sub>	W <sub>1</sub>	H <sub>1</sub>	H <sub>3</sub>	cable Inlet *
* CL213-0442-1-09	8	S-1308-CEA(09)	33.5	42.5	18.5	36	24.5	D φ
* CL213-0443-4-09	12	S-1312-CEA(09)	40.5	49.5	18.5	41	27	A×B
* CL213-0444-7-09	16	S-1316-CEA(09)	49.5	59.5	18.5	45	29	A×B
* CL213-0445-0-09	20	S-1320-CEA(09)	44.5	54.5	23.5	48	30.5	A×B
* CL213-0446-2-09	24	S-1324-CEA(09)	51.5	61.5	23.5	40	26.5	D φ
* CL213-0447-5-09	28	S-1328-CEA(09)	55.5	65.5	23.5	57	35	A×B
* CL213-0376-9-09	34	S-1334-CEA(09)	61.5	71.5	23.5	59	36	A×B
* CL213-0357-4-09	45	S-1345B-CEA(09)	76	86	23.5	56	34.5	A×B
* CL213-0370-2-09	60	S-1360B-CEA(09)	94	104	23.5	63	38	A×B

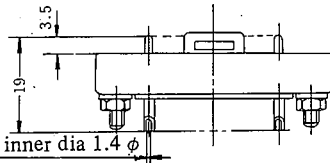
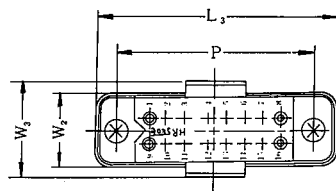
\* standard

\* see page 82 for cable inlet size.

# Connectors with Bracket



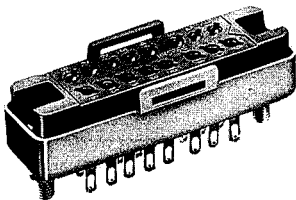
CL213-0045-1  
P-1316-SB



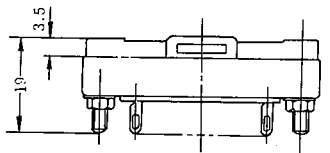
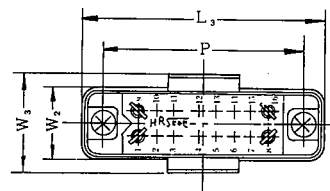
Unit: mm

HRS No.	No. of Pin	Part No.	W <sub>2</sub>	W <sub>3</sub>	P	L <sub>3</sub>
* CL213-0043-6-09	8	P-1308-SB(09)	13.5	17.5	25	31.5
* CL213-0044-9-09	12	P-1312-SB(09)	13.5	17.5	32	38.5
* CL213-0045-1-09	16	P-1316-SB(09)	13.5	17.5	40	47.5
* CL213-0046-4-09	20	P-1320-SB(09)	18.5	22.5	35	42.5
* CL213-0047-7-09	24	P-1324-SB(09)	18.5	22.5	42	49.5
* CL213-0048-0-09	28	P-1328-SB(09)	18.5	22.5	46	53.5
* CL213-0049-2-09	34	P-1334-SB(09)	18.5	22.5	52	59.5
* CL213-0358-7-09	45	P-1345B-SB(09)	18.6	22.6	66	73.5
* CL213-0371-5-09	60	P-1360B-SB(09)	18.6	22.6	84	91.5

\*: standard



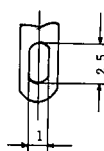
CL213-0052-7  
S-1316-SB



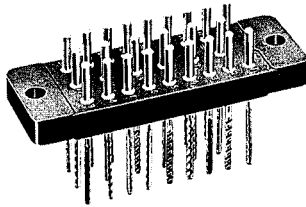
Unit: mm

HRS No.	No. of Pin	Part No.	W <sub>2</sub>	W <sub>3</sub>	P	L <sub>3</sub>
* CL213-0050-1-09	8	S-1308-SB(09)	13.5	17.5	25	31.5
* CL213-0051-4-09	12	S-1312-SB(09)	13.5	17.5	32	38.5
* CL213-0052-7-09	16	S-1316-SB(09)	13.5	17.5	40	47.5
* CL213-0053-0-09	20	S-1320-SB(09)	18.5	22.5	35	42.5
* CL213-0054-2-09	24	S-1324-SB(09)	18.5	22.5	42	49.5
* CL213-0055-5-09	28	S-1328-SB(09)	18.5	22.5	46	53.5
* CL213-0056-8-09	34	S-1334-SB(09)	18.5	22.5	52	59.5
* CL213-0359-0-09	45	S-1345B-SB(09)	18.6	22.6	66	73.5
* CL213-0372-8-09	60	S-1360B-SB(09)	18.6	22.6	84	91.5

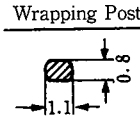
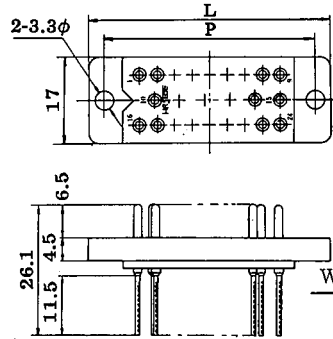
\*: standard



## Wire Wrapping Pin Insert



CL213-0577-0  
P-1324WF



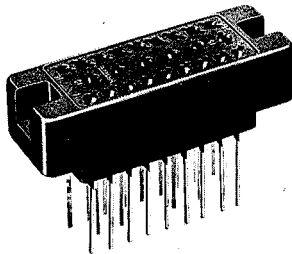
Unit: mm

HRS No.	No. of pin	Part No.	L	P
※CL213-0577-0-09	24	P-1324WF(09)	48	42
※CL213-0578-3-09	28	P-1328WF(09)	52	46
※CL213-0504-7-09	34	P-1334WE(09)	58	52
※CL213-0537-6-09	45	P-1345WF(09)	72	66
※CL213-0455-3 Note(1)	60	P-1360WE	90	84

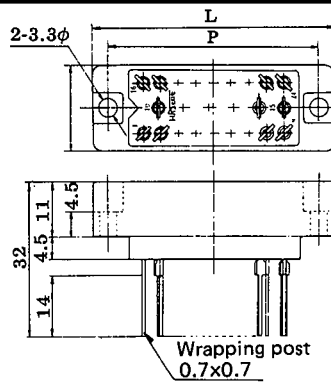
Note: (1) Correspond to CN-9060D2F Connectors of NTT Specifications No.1931.  
(2) Wire range: 0.32 to 0.5 φ (solid)

※Standard

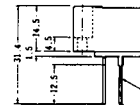
## Wire Wrapping Socket Insert



CL213-0582-0  
S-1324WB



S-1360WE dimensions



Unit: mm

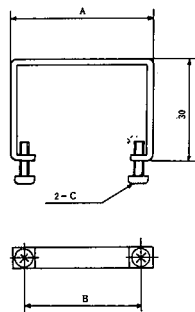
HRS No.	No. of Pin	Part No.	L	P
*CL213-0582-0-09	24	S-1324WB(09)	48	42
*CL213-0583-3-09	28	S-1328WB(09)	52	46
*CL213-0384-7-09	34	S-1334WB(09)	58	52
*CL213-0538-9-09	45	S-1345WB(09)	72	66
*CL213-0385-0-09	60	S-1360WB(09)	90	84
*CL313-0457-9-Note(1)	60	S-1360WE	90	84

Note: (1) Correspond to CN-9060D2F Connectors of NTT Specifications No. 1931.

(2) Wire range: 0.32 to 0.5φ (solid)

※Standard

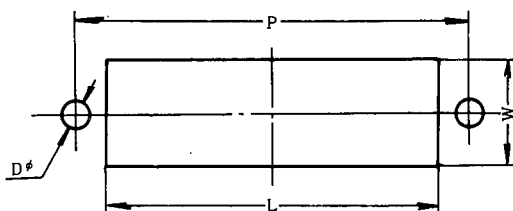
## Handle



Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C
CL213-0057-0-01	8	P-1308-H(01)	31	25	M2.3×8

## 1300 Series Mounting Hole Dimensions



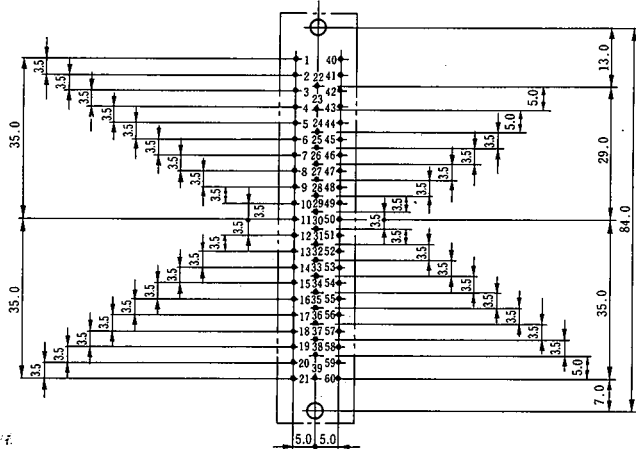
Unit: mm

No. of Pin	L	P	W	D φ
8	19	25	10	2.8
12	26	32	10	2.8
16	33	40	10	3.2
20	28	35	15	3.2
24	35	42	15	3.2
28	39	46	15	3.2
34	45	52	15	3.2
45	59	66	15	3.2
60	77	84	15	3.2

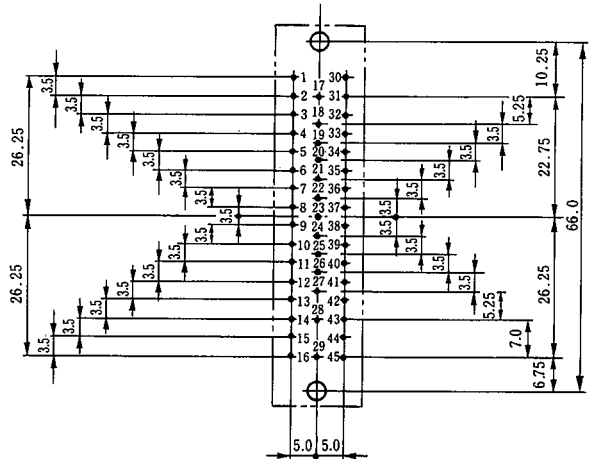
# Location Drawing for Motherboard

Note 1: Terminal number arrangement illustrated below shows the mating side of the female unit.  
 2: On a male unit, the row with pin terminal number No.1 is located on the right.

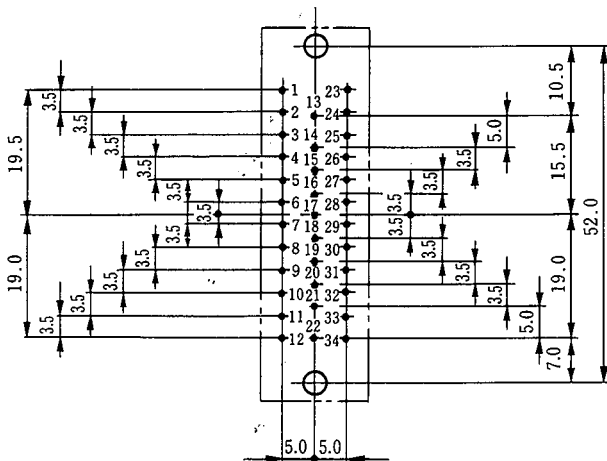
● 60Pin



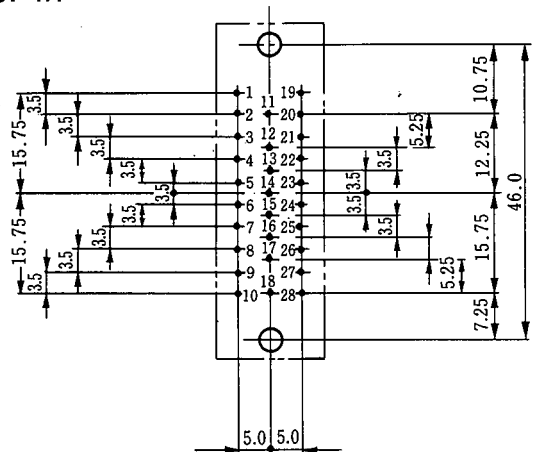
● 45Pin



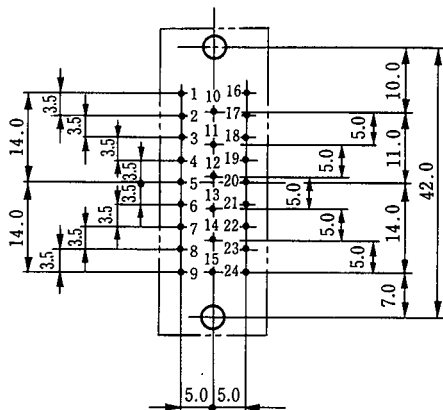
● 34Pin



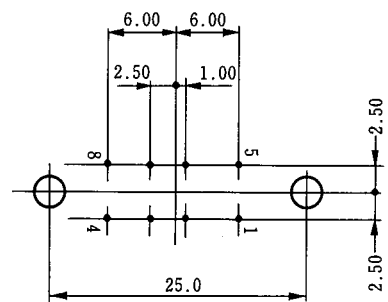
● 28Pin



● 24Pin



● 8 Pin





# TOP TOUCH LOCKING CONNECTOR (NTT Specification)

## General

These connectors have a top-touch lock, developed from the standard side lock, to increase the connector packing density. Developed jointly with NTT as an indoor device for NTT data communications. The connectors are specified in NTT Specifications SPEC

1931.

Available in three models of 34, 45 and 60 pins. The connectors are the well-known HIROSE original 1300 series, which have a broad variety of applications.

## Features

- (1) Facilitates high-density connector packaging due to top-touch lock.
- (2) Locking mechanism requires no resetting, and a well-designed grip allows you to insert and extract the connector easily. The secure holding force assures that the connector will withstand up to 30 kg in any direction.
- (3) Plug case is easy to assemble and maintain because it is divided, including the cable inlet.
- (4) All plug cases have the same packaging height, allowing you to unify the connector packaging space.
- (5) Made of ABS resin, plug case is light, durable, and attractive.

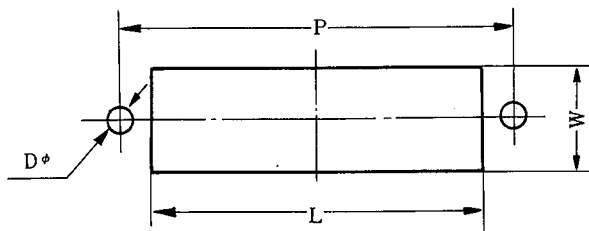
## Materials

Description	Material	Finish
Insulator	Epoxy resin	Brownish green
Male terminal	Brass	Silver-plated
Female terminal	Phosphor bronze	Silver-plated
Plug case	ABS resin	2.5PB 6.0/2.0 (color)
Stopper bracket	Copper	Nickel-plated

## Electrical Specifications

Item	Standard
Contact resistance	5mΩ or less
Current rating	5A
Insulation resistance	1,000MΩ or higher at DC 500V
Withstand voltage	AC1200V for one minute

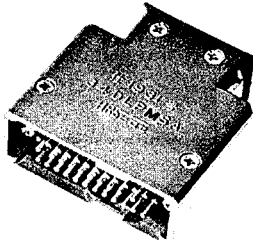
## Mounting Hole Dimensions



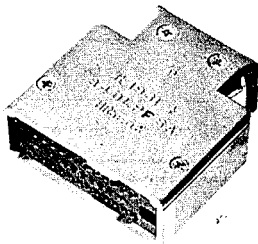
No. of Pin	Unit: mm			
	L	P	W	D <sup>φ</sup>
34	45	52	15	3.2
45	59	66	15	3.2
60	77	84	15	3.2



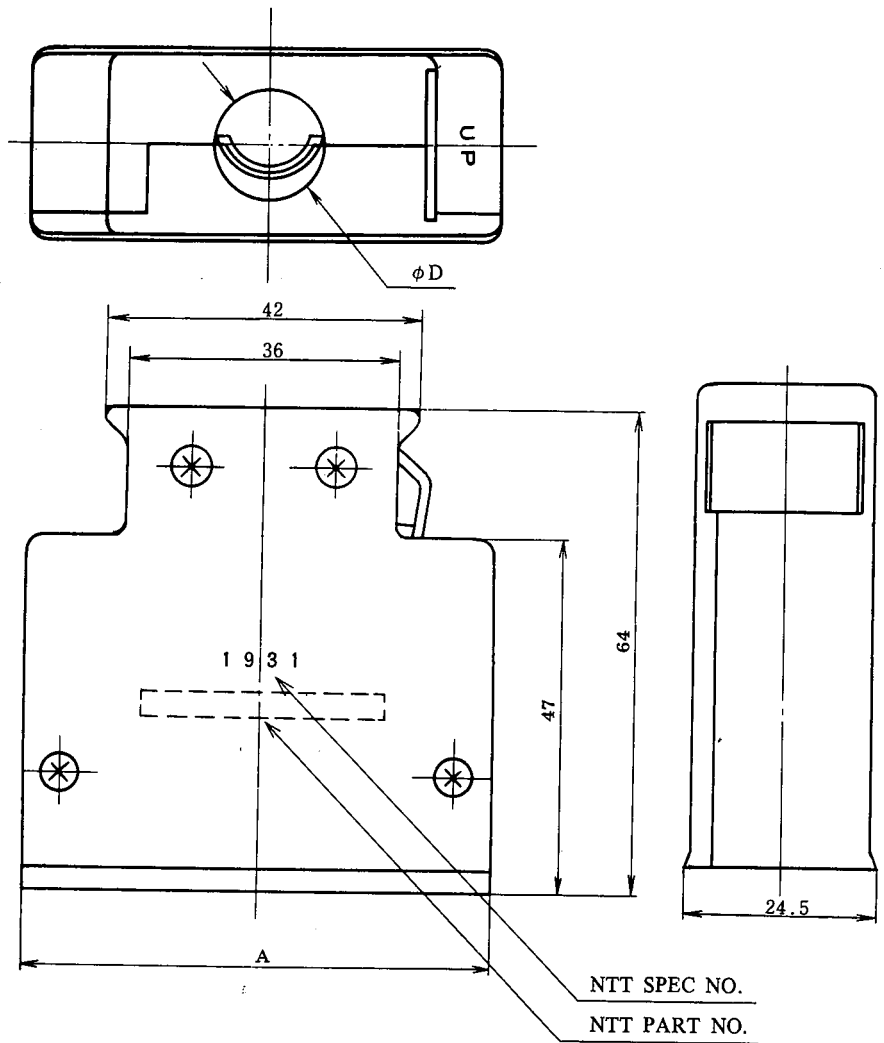
# Vertical Cable Inlet Type



CL213-0407-0  
P-1334B-CTC



CL213-0408-3  
S-1334B-CTC



## (Male Connector)

Unit: mm

HRS No.	NO. of Pin	Part No.	A	D <sup>†</sup>	NTT Part No.	NTT Short Form
*CL213-0407-0	34	P-1334B-CTC	62.5	14	CN-5834DLPMSA	34DLPMSA
*CL213-0413-3	45	P-1345B-CTC	76.5	14	CN-7245DLPMSA	45DLPMSA
*CL213-0394-0	60	P-1360B-CTC	94.5	15	CN-9060DLPMSA	60DLPMSA

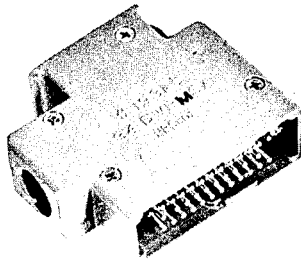
## (Female Connector)

Unit: mm

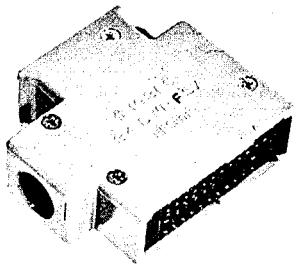
HRS No.	NO. of Pin	Part No.	A	D <sup>†</sup>	NTT Part No.	NTT Short Form
*CL213-0408-3	34	S-1334B-CTC	62.5	14	CN-5834DLPFSA	34DLPFSA
*CL213-0414-6	45	S-1345B-CTC	76.5	14	CN-7245DLPFSA	45DLPFSA
*CL213-0419-0	60	S-1360B-CTC	94.5	15	CN-9060DLPFSA	60DLPFSA

\* Standard

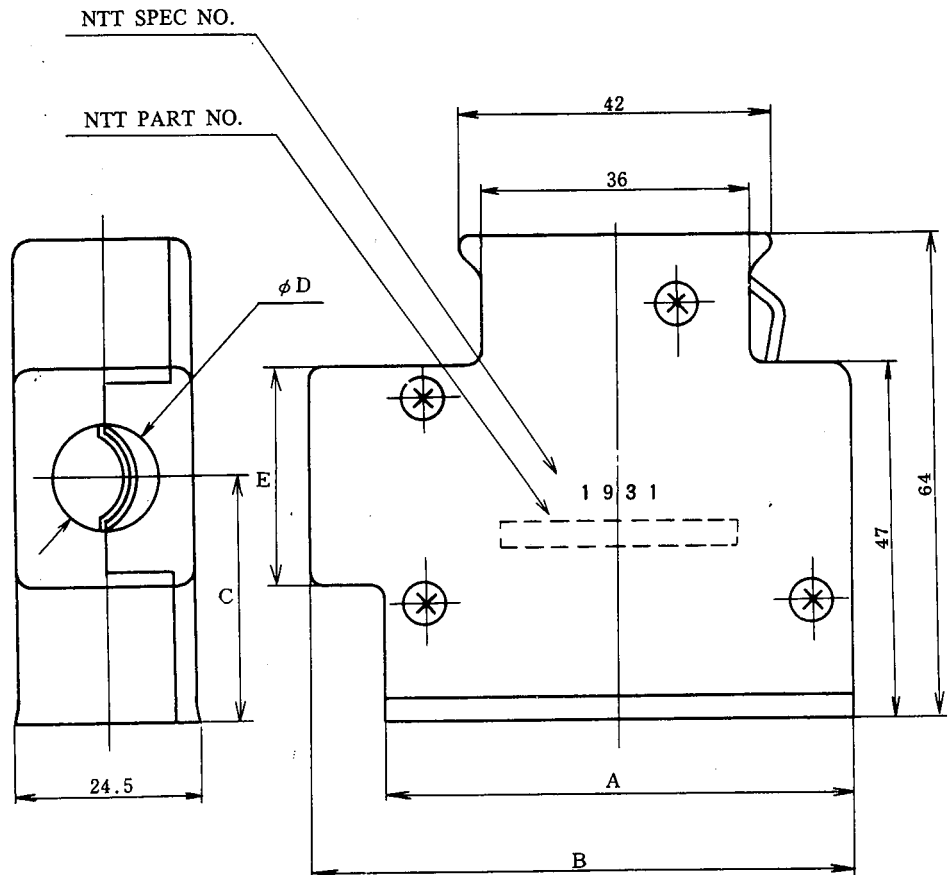
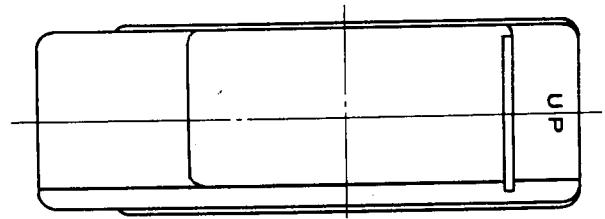
# Lateral Cable Inlet Type



CL213-0409-6  
P-1334B-CEC



CL213-0410-5  
S-1334B-CEC



### (Male Connector)

Unit: mm

HRS No.	NO. of Pin	Part No.	A	B	C	D $\phi$	E	NTT Part No.	NTT Short Form
*CL213-0409-6	34	P-1334B-CEC	62.5	72.5	32.5	14	29	CN-5834DWPMSA	34DWPMSA
*CL213-0415-9	45	P-1345B-CEC	76.5	86.5	32.5	14	29	CN-7245DWPMSA	45DWPMSA
*CL213-0420-9	60	P-1360B-CEC	94.5	104.5	32.0	15	30	CN-9060DWPMSA	60DWPMSA

### (Female Connector)

Unit: mm

HRS No.	NO. of Pin	Part No.	A	B	C	D $\phi$	E	NTT Part No.	NTT Short Form
*CL213-0410-5	34	S-1334B-CEC	62.5	72.5	32.5	14	29	CN-5834DWPMSA	34DWPMSA
*CL213-0400-1	60	S-1360B-CEC	94.5	104.5	32.0	15	30	CN-9060DWPMSA	60DWPMSA

\* Standard

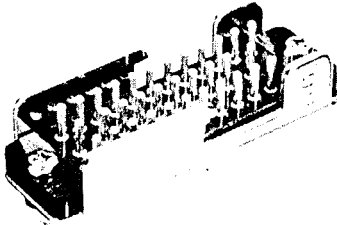
# Stopper Bracket

(With Pin Insert)

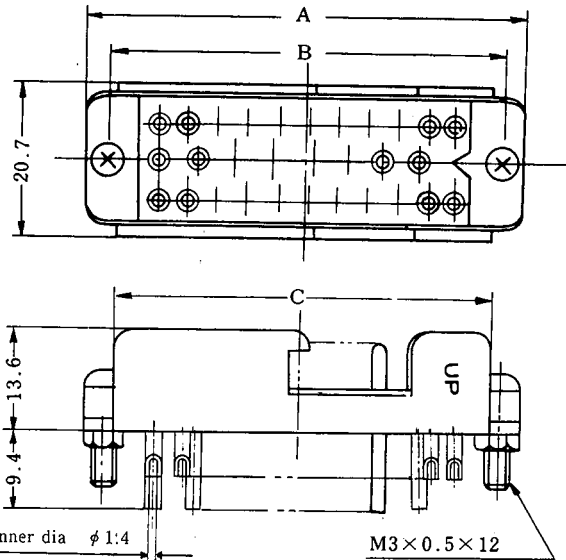
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	NTT Part No.	NTT Short Form
* CL213-0411-8	34	P-1334B-ST	58	52	50	CN-5834DJMSA Connector	34DJMSA
* CL213-0417-4	45	P-1345B-ST	72	66	64	CN-7245DJMSA Connector	45DJMSA
* CL213-0421-1	60	P-1360B-ST	90	84	82	CN-9060DJMSA Connector	60DJMSA

\*: Standard



CL213-0411-8  
P-1334B-ST

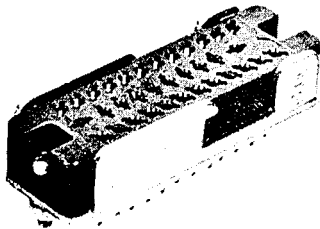


(With Socket Insert)

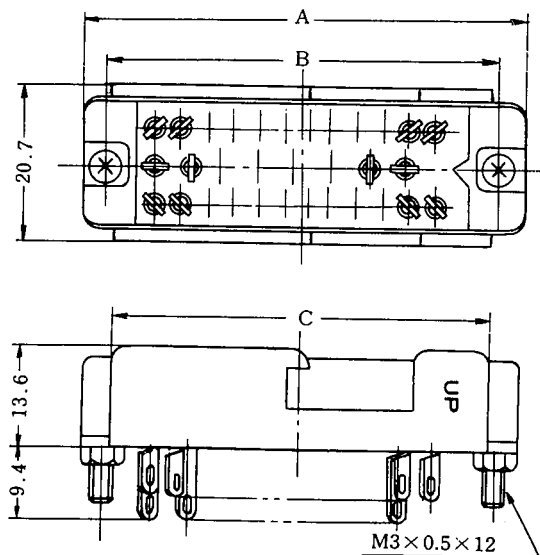
Unit: mm

HRS No.	No. of Pin	Part No.	A	B	C	NTT Part No.	NTT Short Form
* CL213-0412-0	34	S-1334B-ST	58	52	50	CN-5834DJMSA Connector	34DJMSA
* CL213-0418-7	45	S-1345B-ST	72	66	64	CN-7245DJMSA Connector	45DJMSA
* CL213-0395-3	60	S-1360B-ST	90	84	82	CN-9060DJMSA Connector	60DJMSA
CL213-0660-2-09	60	S-1360WE-ST(09)	90	84	82	—	—

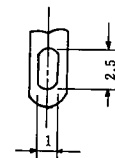
\*: Standard



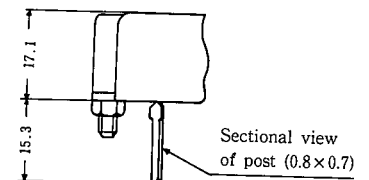
CL213-0412-0  
S-1334B-ST



Solder eyelet



See dimensional drawing S-1360WE



# TOP TOUCH LOCKING CONNECTOR (HIROSE Original)

## General

The 1300 series top touch locking 24-contact connectors are of the same design as the well-known 1600 series top-touch locking connectors. The 1300 series connectors feature a plug case of lightweight, sturdy plastic with a cable inlet allowing cable entry in either

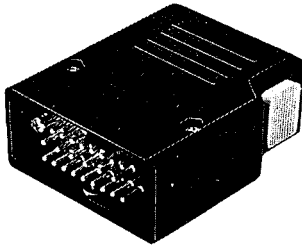
straight or lateral side as necessary, and simple, single-operation connector insertion and extraction. These are suitable for enhancing the packaging density.

## Main Specifications

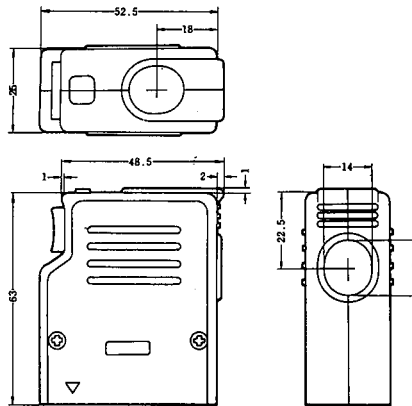
Item	Standard
Contact resistance	5mΩ or less at 1 ADC
Insulation resistance	1,000 M Ω or higher at 500 VDC
Withstand voltage	AC1200V for one minute
Current rating	5A

## Main Material

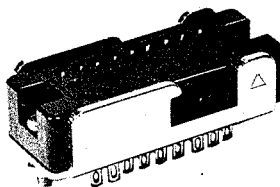
Description	Material	Finish
Insulator	Epoxy resin	Bronnish green
Male terminal	Brass	Silver-plated
Female terminal	Phosphor bronze	Silver-plated
Plug case	ABS	Black
Stopper bracket	Steel	Treated with dichromate over zinc-plating



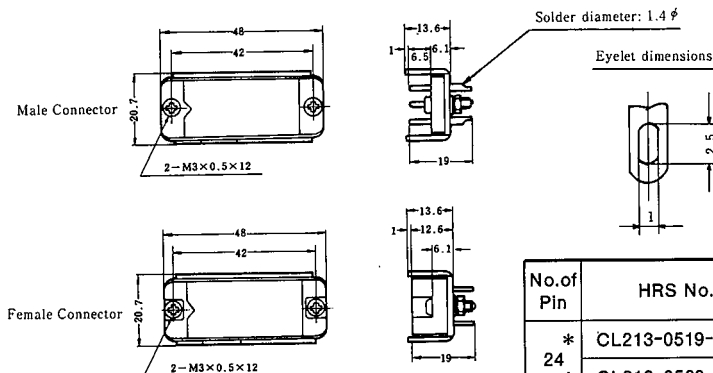
CL213-0517-9(09)  
P-1324-CF(09)



No. of Pin	HRS No.	Part No.
* 24	CL213-0517-9(09)	P-1324-CF(09)
* 24	CL213-0518-1(09)	S-1324-CF(09)



CL213-0520-3(09)  
S-1324-StA(09)



No. of Pin	HRS No.	Part No.
* 24	CL213-0519-4(09)	P-1324-StA(09)
* 24	CL213-0520-3(09)	S-1324-StA(09)

\* standard

## General

Based on the 1300 Series connectors with 8 or more contacts, this connector is designed to be compact and light in weight. Grey polyacetal is used as the material for the plug case and bracket. The case has a unique mono-blocking mechanism, enabling easy and

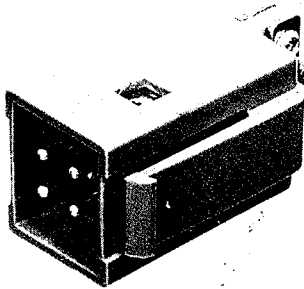
reliable one-touch operation. Other special features are screwless insert assembly with retainers and a deep receptacle shell which offers a low-profile sinking mount.

### Electrical Characteristics

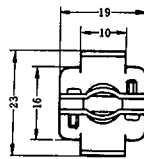
Item	Standard
Contact resistance	5mΩ or less at DC500V
Insulation resistance	1000M Ω or higher at DC500V
Withstand voltage	AC1200V for 1 minute
Current rating	5A

### Material and Finish

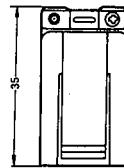
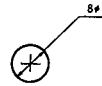
Description	Material	Finish
Molding	Epoxywith	Light-green colour
Pin contact	Brass	Silver plated
Socket contact	Phosphor bronze	Silver plated
Stopper bracket	Polyacetal	Grey plated
Handle	Polyacetal	Grey plated



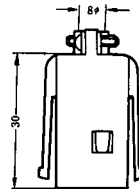
CL213-0611-7  
P-1304-CT



Cable inlet

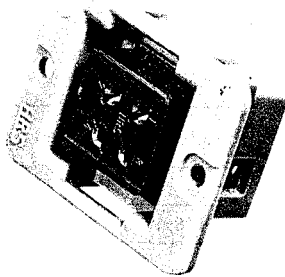


Cable inlet

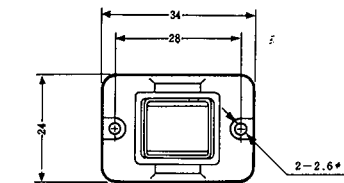


No. of Pin	HRS No.	Part No.
4	* CL213-0611-7-09	P-1304-CT(09)
	* CL213-0612-0-09	S-1304-CT(09)
6	* CL213-0513-8-09	P-1306-CT(09)
	* CL213-0514-0-09	S-1306-CT(09)

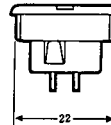
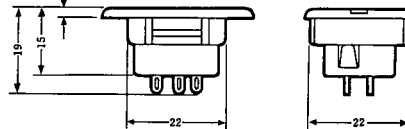
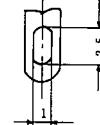
\*: Standard



CL213-0614-5  
S-1304-DB



solder Hole

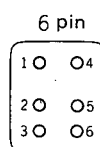
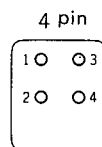


No. of Pin	HRS No.	Part No.
4	* CL213-0613-2-09	P-1304-DB(09)
	* CL213-0614-5-09	S-1304-DB(09)
6	* CL213-0515-3-09	P-1306-DB(09)
	* CL213-0516-6-09	S-1306-DB(09)

\*: Standard

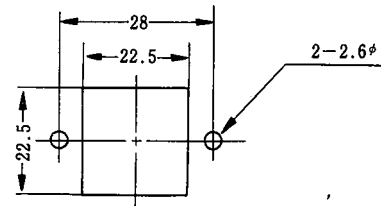
### Contact Arrangement

(terminal side of pin insert)



### Mounting Hole

Mounting Hole

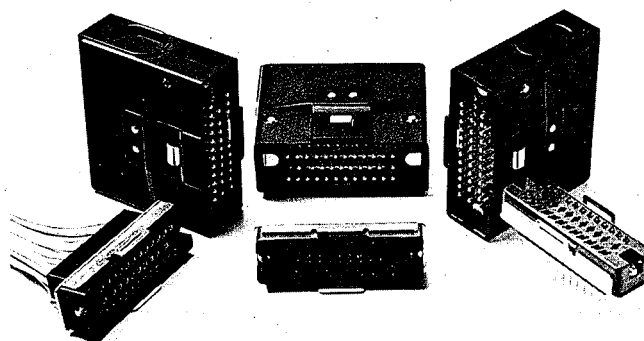


# 1300 SERIES SIDE-LOCK TYPE PLUG CASES

## General

The 1300 Series plug cases and stopper brackets for both upright and transverse receptacles are available in nine models, with 8, 12, 16, 20, 24, 28, 34, 45, or 60 positions. These are interchangeable with conventional pushbutton-lock type plug cases and stopper brackets

(including those designated by NTT specification 1931). In addition to their simple construction, these general-purpose connectors are highly reliable, lightweight, and durable and feature outstanding operability.



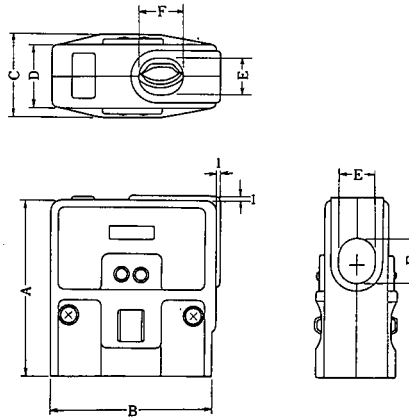
## Material and Finish

Description	Material	Finish
Plug Shell	ABS	Black(Matte finish)
Stopper Bracket	Steel	Zinc chromated

## Features

- (1) The lock mechanism is very simple and secure.
- (2) The orientation of the cable inlet port of plug case, vertical or horizontal, can be selected by the user. It is capped on the free side.
- (3) The plug case is made of a tough ABS resin, that is lightweight and durable.
- (4) The plug case is split at the center of the cable inlet port and requires fewer screws. It is very workable, especially when connecting wires. It is also convenient for assembly and maintenance operations.
- (5) The plug case uses an attractive design that matches well with the external appearance of all equipment.
- (6) Solder, press-fit or lapping type connector units in the 1300 series (except for S-1360E CL213-0457-9) can be connected to the plug case.
- (7) Both the plug case and stopper bracket are interchangeable, respectively, with the die-cast frame plug case (12-CTA, CEA type), and with the stopper bracket (13"-SB type). However, it is not interchangeable with the 13"-CTA-LF and 13"-CEA-LF (relay case).

## Plug Shell



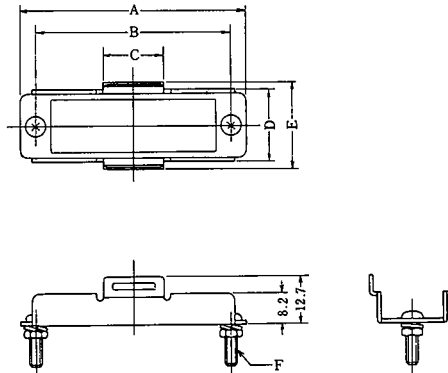
Unit: mm

No. of Pin	HRS No.	Part No.	A	B	C	D	E	F
* 8	CL213-0729-7	1308-CM	47	36	22	17	10 <sup>φ</sup>	
* 12	CL213-0730-6	1312-CM	47	43	22	17	10	12
* 16	CL213-0731-9	1316-CM	50	52	22	17	10	15
* 20	CL213-0732-1	1320-CM	51	47	27	22	14 <sup>φ</sup>	
* 24	CL213-0733-4	1324-CM	51	54	27	22	14	16
* 28	CL213-0734-7	1328-CM	55	58	27	22	14	18
* 34	CL213-0735-0	1334-CM	55	64	27	22	14	21
* 45	CL213-0736-2	1345-CM	61	78	27	22	14	27
* 60	CL213-0737-5	1360-CM	68	96	27	22	14	34

\*: Standard

Note: All products are available in plug cases. For units order separately

## Stopper Bracket



Unit: mm

No. of Pin	HRS No.	Part No.	A	B	C	D	E	F
* 8	CL213-0738-8	1308-SBA	32	25	10	13.8	17.5	M2.3×0.4×12
* 12	CL213-0739-0	1312-SBA	39	32	10	13.8	17.5	M2.3×0.4×12
* 16	CL213-0740-0	1316-SBA	48	40	14	13.8	17.5	M3 ×0.5×12
* 20	CL213-0741-2	1320-SBA	43	35	14	18.8	22.5	M3 ×0.5×12
* 24	CL213-0742-5	1324-SBA	50	42	14	18.8	22.5	M3 ×0.5×12
* 28	CL213-0743-8	1328-SBA	54	46	16	18.8	22.5	M3 ×0.5×12
* 34	CL213-0744-0	1334-SBA	60	52	16	18.8	22.5	M3 ×0.5×12
* 45	CL213-0745-3	1345-SBA	74	66	16	18.8	22.5	M3 ×0.5×12
* 60	CL213-0746-6	1360-SBA	92	84	22	18.8	22.5	M3 ×0.5×12

\*: Standard

Note: All products are available in plug cases. For units order separately