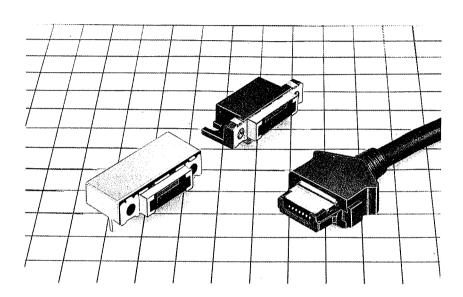
# 3100 SERIES LOW PROFILE CONNECTOR FOR PREVENTING EMI

#### General

The 3100 series low profile I/O connectors for preventing EMI are perfect for today's compact electronic equipment.

Available in 6, 8, 12, 14 and 16 pins.



#### **Features**

- (1) The metal shell guide structure for the receptacle connector reduces drastically the height for the substrate to 7mm.
- (2) The metal shell with a molded cover case is designed to shield it from electrostatic discharge (ESD).
- (3) The cantilever profile of the female contact ensures effortless coupling and long service life.
- (4) The effective engagement length is of sequence structure and sufficient to allow the shielded part to engage first when connecting.
- (5) The cable can be terminated efficiently just by crimping with a jig after passing the cable through the guide plate hole.
- (6) Cables AWG 26 to AGW 30 are applicable by partially changing the guide plate since the male cnnoector adopts a U-slit type connection.
- (7) The side latching method of the molded cover assures easy locking of the plug connector.

#### **Application**

Office Automation, Communications, Home Automation and Other equipment.

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# **Specification**

Specification		
Current capacity	0.5A	
Rated Voltage	AC 125V	
Insulation Resistance	Min. 250MΩ at DC 100V	
Contact Resistance	Max. 35mΩ at DC 1mA	
Withstanding Voltage AC 300Vr.m.s for 1 minu		

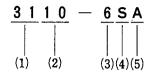
Relation between gulde plate and applicable coating O.D.					
Hole dia (mm) of Wire Configuration Guide Plate	ф 0.65	ф 0.85	ф 1		
Applicable Cable Cut dia (mm)	ф 0.57 <b>~</b> ф 0.63	ф 0.75 <b>~</b> ф 0.83	ф 0.88∼ ф 0.98		

## Material & Finish

		Material Finish		
	Insulation	PBT resin	Black UL94V-0	
Receptacle Contact Shell	Contact	Brass	Selective gold plating	
	Shell	Brass	Solder plating	
Plug	Insulation	Polycarbonate Resin	White for AWG #28	
			Black for AWG #30	
	Contact	Brass	Selective gold plating	
	Guide Plate	Polycarbonate resin	Transparent	
	Shell	Brass	Solder plating	
Cover		Polycarbonate resin		

### **Ordering Information**

#### Receptacle



- (1) Series Number: 31
- (2) Type

10: Right Angle Dip

- (3) No. of Pins: 6, 8, 12, 14, 16
- (4) Type of opening

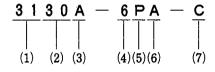
S: Receptacle

(5) Additional Function

Blank: Standard

A: All Shield Type

### Plug



- (1) Series Number: 31
- (2) Type 30: AWG28, 26 IDC 31: AWG30, IDC
- (3) Hole dia. of Wire Configuration Tube Plate Black: φ 1.0 (φ 0.88~ φ 0.98)

A: φ 0.85( φ 0.75~ φ 0.83)

- (4) No. of Pins: 6, 8, 12, 14, 16
- (5) Type of opening P: Plug
- (6) Cover Type

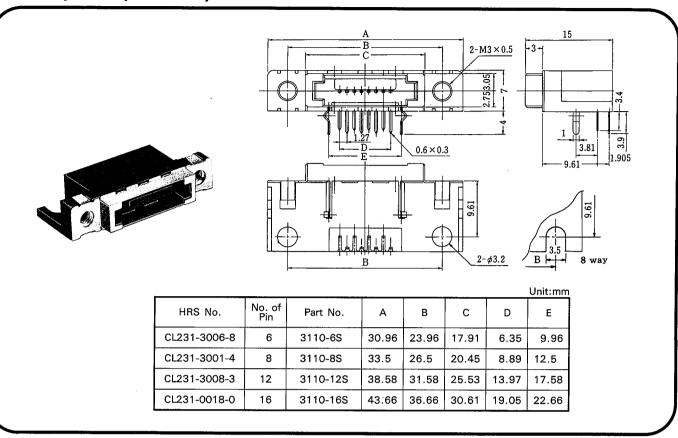
Blank: Straight Cable Exit

A: Side Cable Exit

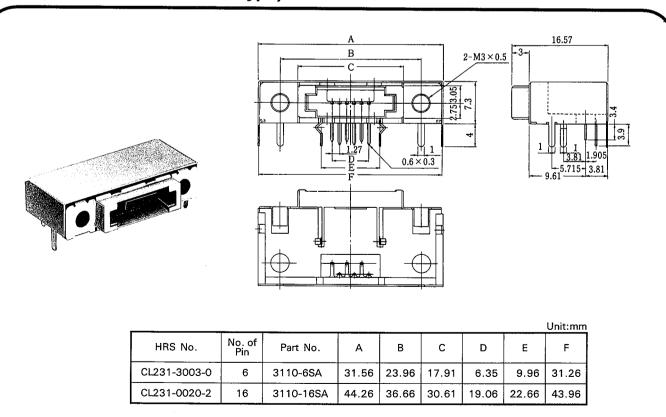
(7) Cover

C: Standard

### Receptacle (Standard)

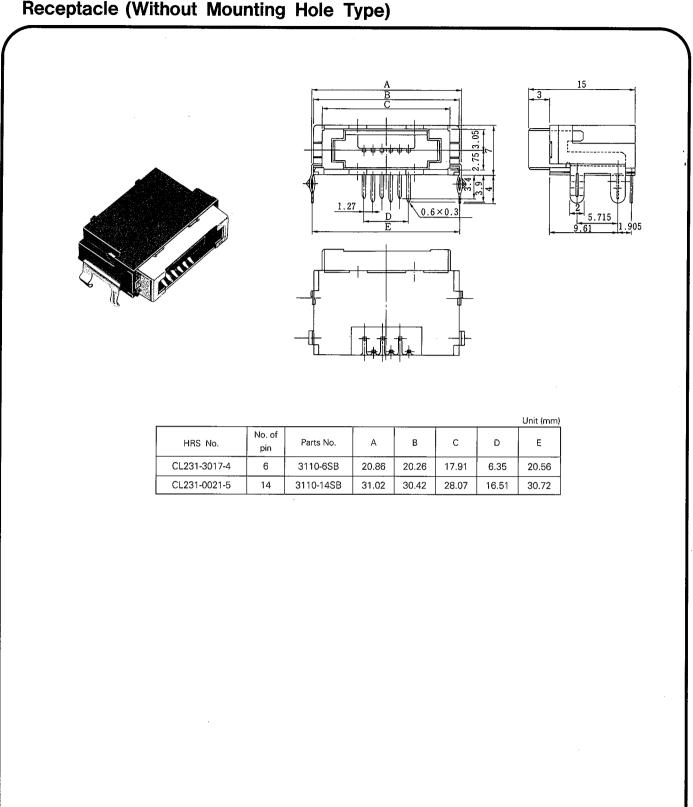


# Receptacle (All Shielded Type)

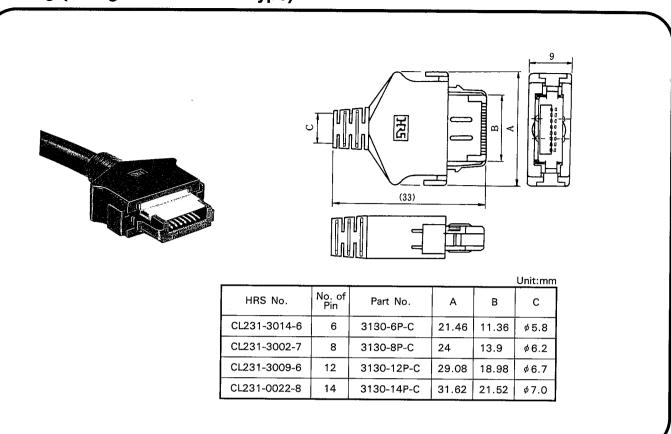


HIROSE EL

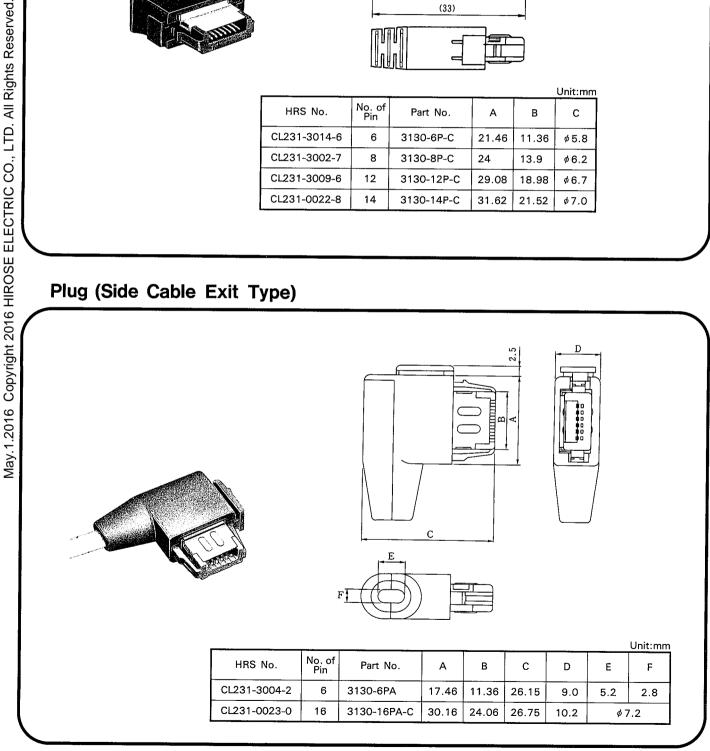
# Receptacle (Without Mounting Hole Type)



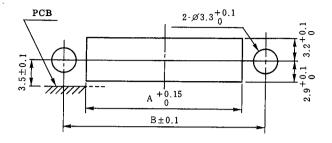
# Plug (Straight Cable Exit Type)



# Plug (Side Cable Exit Type)

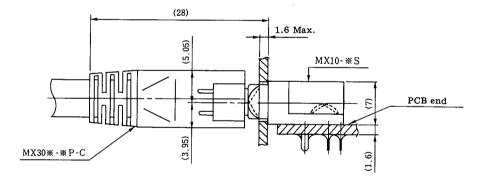


### Panel Cutout (Thickness of Panel: Max.1.6mm)



Unit: mm No. of HRS No. Part No. Α В CL231-3006-8 6 3110- 6S 18.06 23.96 CL231-3001-4 3110- 8S 20.6 CL231-3008-3 3110-12S 25.68 31.58 CL231-0018-0 3110-16S 30.76 36.66 CL231-0021-5 3110-14SB 28.22

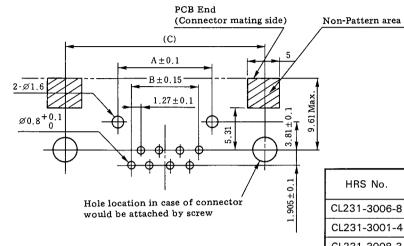
### **Coupling Status**



Note: Screw for Panel: M3 x 0.5 length 6 mm.

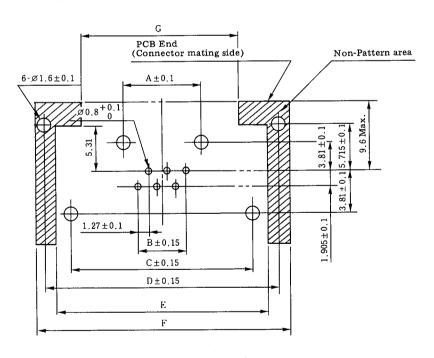
#### **Backboard Pattern**

## (Standard)



Unit:mm No. of Pin С HRS No. Part No. Α В CL231-3006-8 23.96 3110-6S 9.96 6.35 CL231-3001-4 3110-8S 12.5 8.39 CL231-3008-3 12 3110-12S 17.58 13.97 31.58 CL231-0018-0 3110-16S 22.66 19.05 36.66

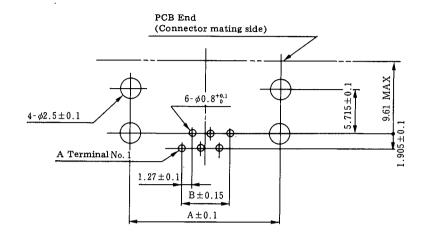
#### (All Shielded Type)



									Jnit:mm
HRS No.	No. of Pin	Part No.	А	В	С	D	Е	F	G
CL231-3003-0	6	3110-6SA	9.96	6.35	23.96	31.26	27.56	31.96	18.96
CL231-0020-2	16	3110-16SA	22.66	19.05	36.66	43.96	40.26	44.66	31.66

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# (Without Mounting Hole Type)



0				Unit:mm
HRS No.	No. of Pin	Part No.	А	В
CL231-3017-4	4 6	3110-6SB	20.56	6.35
CL231-0021-	5 14	3110-14SB	30.72	16.51

### **Connecting Method**

Procedure	Specification	Procedure	Specification
1. Termination	Peel the shielded braid and terminate treatment.	4. IDC	Insert the guide plate into the plug temporarily and press it.
	Copper tape		Pre-Insertion  IDC
2. Wire configuration	Configure the cable conductor to the corresponding guide plate.	5. Covering and clamping	Cover the ground plate B and fasten the cable by clamping.
	Hole dia. indication		Clamp
3. Cutting and clamping	Cut the remaining part of the wire and clamp the cable conductor.	6. Covering	
	Crimped connection		

#### **Tooling**

# (Straight Cable Exit Type)

Connector	Process	Tool Name		
3130-6P-C	Wire clamp Remaining part of cable cut		3130-6CT	
	Crimping, Clamp		3130—6GP	
3130–8P–C	Wire clamp Remaining part of cable cut		3130—8CT	
	Crimping, Clamp	Hi-Flex Connecting press (CL550—0082—2)	3130-8GP	
313012PC	Wire clamp Remaining part of cable cut		3130-12CT	
	Crimping, Clamp		3130—12GP	
3130-14P-C	Wire clamp Remaining part of cable cut		3130-14CT	
	Crimping, Clamp		3130—14GP	

# (Side Cable Exit Type)

Connector	Process	Tool Name		
3130—6PA	Wire clamp Remaining part of cable cut		3130-6CT-A	
	Crimping, Clamp	Hi-Flex	31306GPA	
3130-16PA-C	Wire clamp Remaining part of cable cut	Connecting press (CL550—0082—2)	3130-16CT-A	
	Crimping, Clamp		3130—16GP—A	