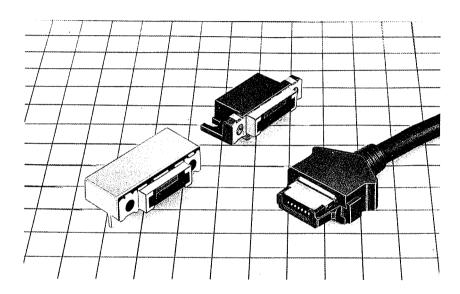
# 3100 SERIES LOW PROFILE CONNECTOR FOR PREVENTING EMI

#### 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**

- 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 ennoector 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.

# **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 minute				

Relation between gulde plate and applicable coating O.D.							
Hole dia (mm) of Wire Configuration Guide Plate	ф 0.65	ф 0.85	ф1				
Applicable Cable Cut dia (mm)	ф 0.57∼ ф 0.63	ф 0.75 <b>~</b> ф 0.83	ф 0.88∼ ф 0.98				

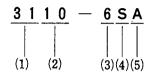
## Material & Finish

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

### **Ordering Information**

#### Receptacle

Plug



- (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

- (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: \$\dagger 0.85(\dagger 0.75\sigma \dagger 0.83)\$

Α. Ψ0.65(Ψ0.75~Ψ0.65

B:  $\phi 0.65(\phi 0.57 \sim \phi 0.63)$ 

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

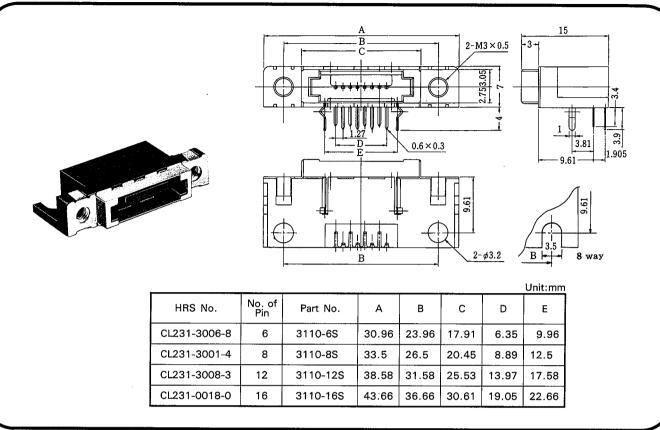
Blank: Straight Cable Exit

A: Side Cable Exit

(7) Cover

C: Standard

### Receptacle (Standard)



### Receptacle (All Shielded Type)

CL231-3003-0

CL231-0020-2

6

16

3110-6SA

3110-16SA

31.56

44.26

23.96

36.66

17.91

30.61

6.35

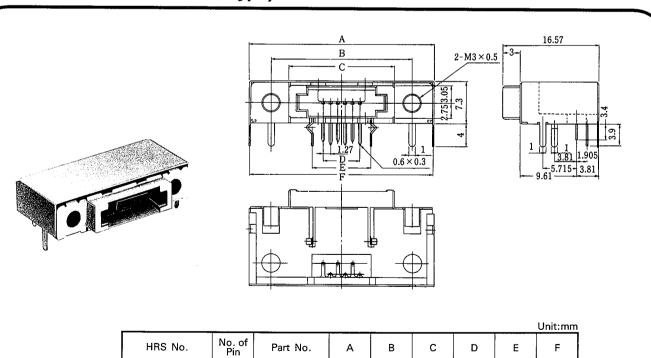
19.06

9.96

22.66

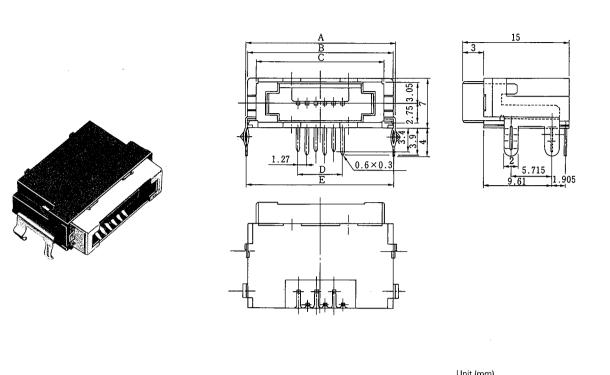
31.26

43.96



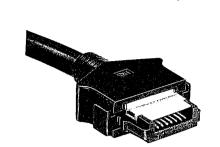
Jul.1.2021 Copyright 2021 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

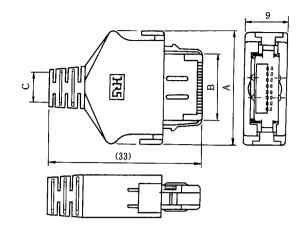
# Receptacle (Without Mounting Hole Type)



							Unit (mm)
HRS No.	No. of pin	Parts No.	А	В	С	D	E
CL231-3017-4	6	3110-6SB	20.86	20.26	17.91	6.35	20.56
CL231-0021-5	14	3110-14SB	31.02	30.42	28.07	16.51	30.72

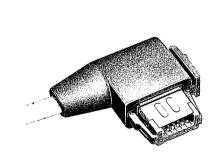
# Plug (Straight Cable Exit Type)

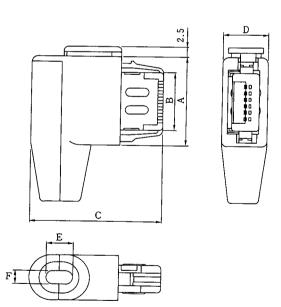




						Unit:mm
i	HRS No.	No. of Pin	Part No.	А	В	С
	CL231-3014-6	6	3130-6P-C	21.46	11.36	ø 5.8
	CL231-3002-7	8	3130-8P-C	24	13.9	ø6.2
	CL231-3009-6	12	3130-12P-C	29.08	18.98	ø6.7
l	CL231-0022-8	14	3130-14P-C	31.62	21.52	φ7.0

# Plug (Side Cable Exit Type)

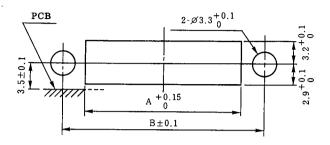




	T		_	Γ	T-			Unit:mm
HRS No.	No. of Pin	Part No.	А	В	С	D	E	F
CL231-3004-2	6	3130-6PA	17.46	11.36	26.15	9.0	5.2	2.8
CL231-0023-0	16	3130-16PA-C	30.16	24.06	26.75	10.2	φ	7.2

Jul.1.2021 Copyright 2021 HIROSE ELECTRIC CO., LTD. All Rights Reserved. Nov.1.2016 Copyright 2016 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

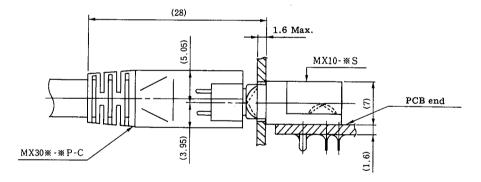
### Panel Cutout (Thickness of Panel: Max.1.6mm)



U	П	•	٤.		ı	11	1	ı	ı	
	-	-	-	-	-	-	-	-	1	

HRS No.	No. of Pin	Part No.	A	В
CL231-3006-8	6	3110- 6S	18.06	23.96
CL231-3001-4	8	3110- 8S	20.6	26.5
CL231-3008-3	12	3110-12S	25.68	31.58
CL231-0018-0	16	3110-16S	30.76	36.66
CL231-0021-5	14	3110-14SB	28.22	

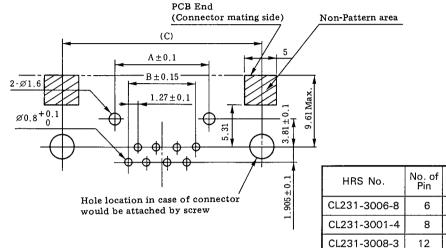
### **Coupling Status**



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

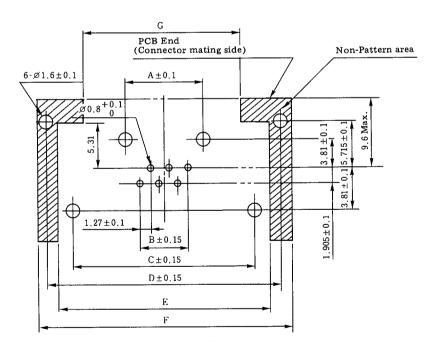
#### **Backboard Pattern**

### (Standard)



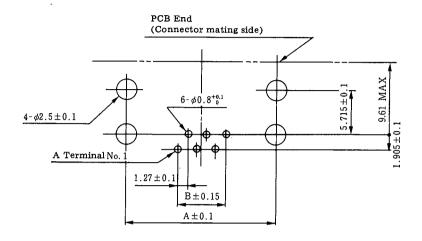
Unit:mm С Part No. Α В 23.96 3110-6S 9.96 6.35 3110-8S 8.39 26.5 CL231-3008-3 12 3110-12S 17.58 13.97 31.58 CL231-0018-0 3110-16S 22.66 19.05 36.66

#### (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

# (Without Mounting Hole Type)



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

Jul.1.2021 Copyright 2021 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
Nov.1.2016 Copyright 2016 HIROSE ELECTRIC CO., LTD. All Rights Reserved

#### **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	Hi-Flex Connecting press	3130—8GP
313012PC	Wire clamp Remaining part of cable cut	(CL550-0082-2)	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		
3100 31 A	Crimping, Clamp	Hi-Flex	31306GPA		
3130–16PA–C	Wire clamp Remaining part of cable cut	Connecting press (CL550–0082–2)	3130-16CT-A		
3130—101 A—0	Crimping, Clamp		3130–16GP–A		