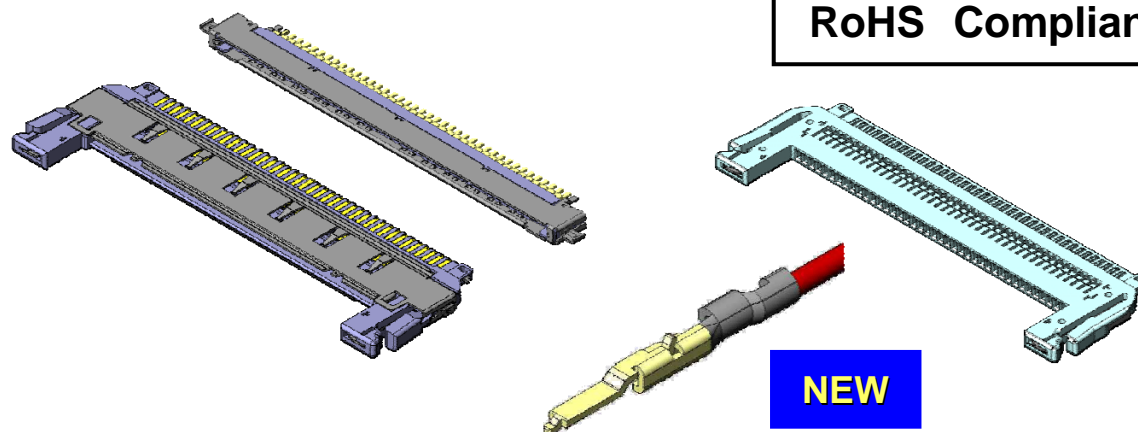


**NEW**



Board-to-Cable Connector for  
High-Speed Differential Transmission  
**FI-NX Series**

CONNECTOR  
MB-0171-2  
December 2008



The FI-NX Series is a board-to-cable LCD interface connector designed for high-speed differential transmission. A discrete wire (twisted pair) plug with crimp contacts has been added to the existing product line-up.

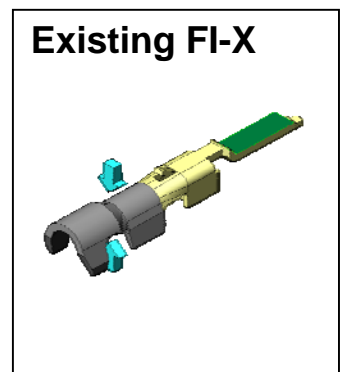
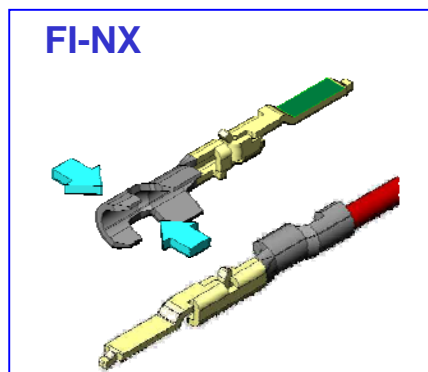
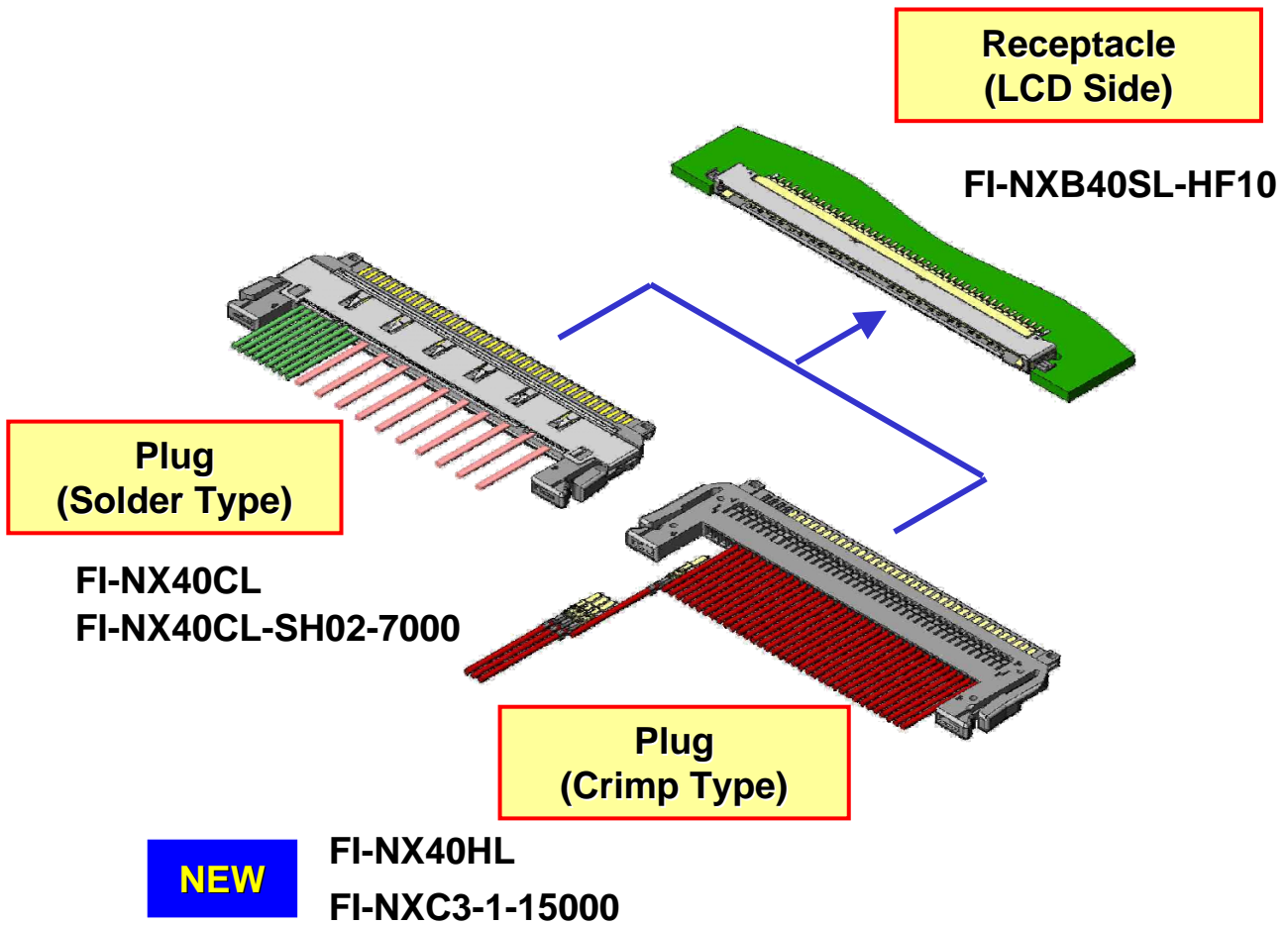
### Features

- 0.8mm contact pitch, 40pos. connector for LVDS transmission, compatible with the VESA 8-bit color LCD standard.
- LCD (LED back light) interface for notebook PC, cable plug available in solder type for fine coaxial wire, or crimp type for discrete wire.
- Superb impedance matching suitable for high-speed differential transmission.
- Low profile, 1.0mm mating height of board-side receptacle (standard bottom mount type).
- Metal shell provides superb shielding. Hold downs on the receptacle serve a dual purpose to reinforce board retention, and also act as ground contacts. When the connector is mated, the plug and receptacle shells connect to allow the plug shell to be grounded.
- Receptacle incorporates a ground plate that is connected to the board through ground terminals located at both ends of the connection area.
- Ni barrier layer is included as a solder diffusion countermeasure for receptacle contacts.
- Mechanical lock included to withstand vibration and shock.
- Mating side of plug has a guide that adjusts misalignments to ensure easy and secure mating.
- Pb-free product.

### General Specifications

- |                                     |  |
|-------------------------------------|--|
| ■ No. of Contacts : 40 pos.         | ■ Rated Current: AC, DC each 0.5A per pos. |
| ■ Contact Resistance: 40m ohm max.  | ■ Rated Voltage: AC, DC each 200V per pos. |
| ■ Dielectric Withstanding Voltage : | ■ Insulation Resistance: 100M ohm min.     |
| AC 500Vr.m.s per minute             | ■ Contact Pitch: 0.8mm                     |
| ■ Operating Temperature:            |  |
| -40 Deg. C to +80 Deg. C            |  |

Product Line-up



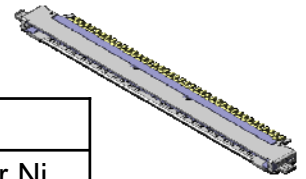
**Note)** Crimp tool and applicator of existing FI-X Series can be used. (Attachment has to be changed).

Materials and Finishes

Receptacle Connector

**FI-NXB40SL-HF10**

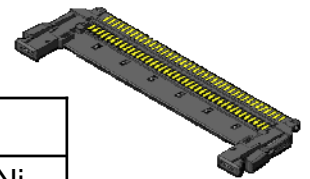
Component	Material / Finish
Contact	Copper alloy/ Contact portion: Au plating over Ni Terminal portion: Sn plating over Ni
Ground Plate	Copper alloy/ Sn plating
Insulator	Heat resistant plastic/ No
Shell	Stainless steel/ Sn plating



Plug Connector, Fine-coaxial Wire, Solder Connection Type

**FI-NX40CL**

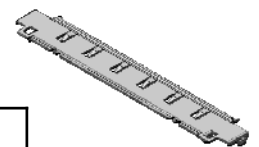
Component	Material / Finish
Contact	Copper alloy/ Contact portion: Au plating over Ni Terminal portion: Sn plating over Ni
Press Fit Shell	Stainless steel/ Sn plating
Insulator	Heat resistant plastic/ No
Lock Spring	Stainless steel/ No



Plug Connector, Fine-coaxial Wire, Solder Connection Type

**FI-NX40CL-SH02-7000**

Component	Material / Finish
Cover Shell	Stainless steel/ Sn plating

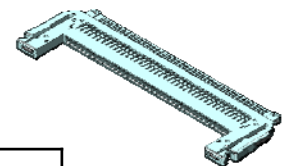


**NEW**

Plug Connector, Discrete Wire, Crimp Connection Type

**FI-NX40HL**

Component	Material / Finish
Ground Plate	Stainless steel/ Sn plating
Insulator	Heat resistant plastic/ No
Lock Spring	Stainless steel/ No



**NEW**

Plug Connector, Discrete Wire, Crimp Connection Type

**FI-NXC3-1-15000**

Component	Material / Finish
Crimp Contact	Stainless steel/ Sn plating
Magazine	Paper
Paper Tape	Paper



Ordering Information

Receptacle Connector (SJ107066)

**FI-NX B 40 S \* L - HF 10**

Series

10 : Mounted Height 1.0mm

B: Bottom Type (Hold-down Type)

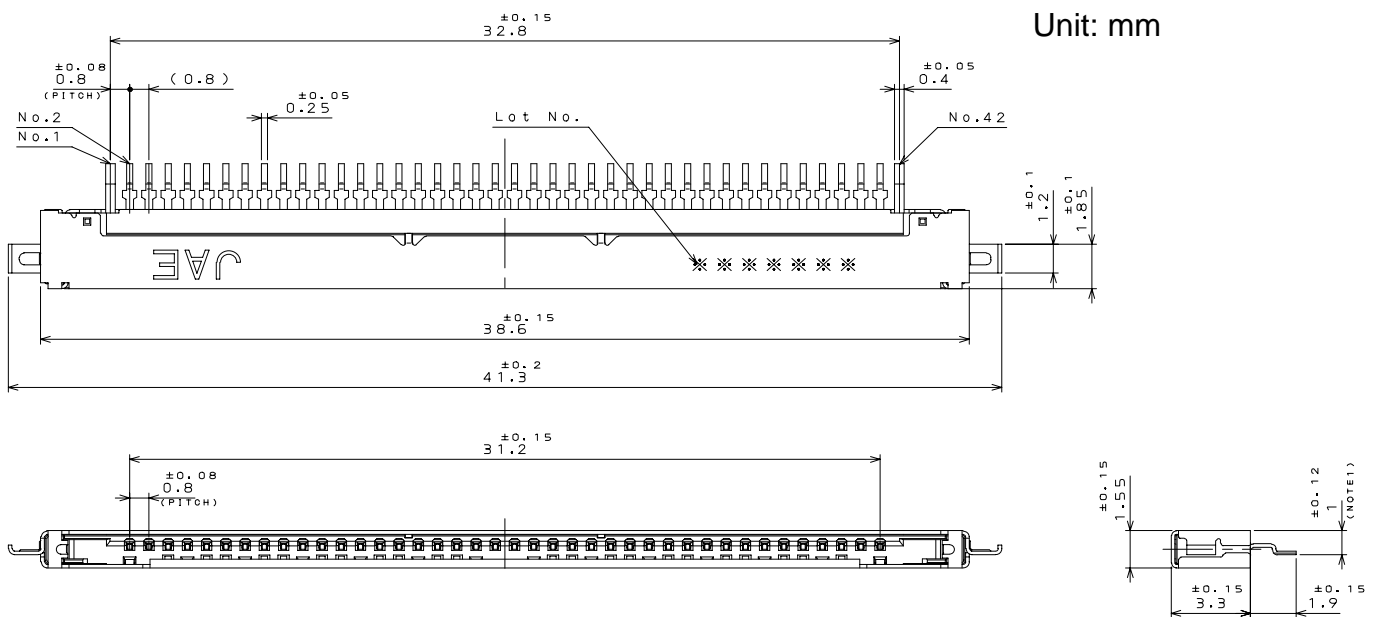
HF: Angle

No. of Contacts: 40 pos.

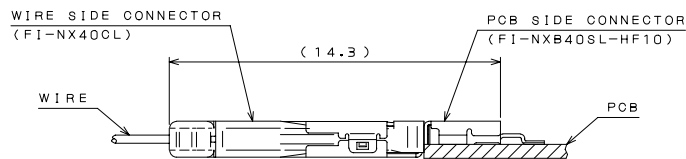
L: Compatible With Lock

S: Receptacle

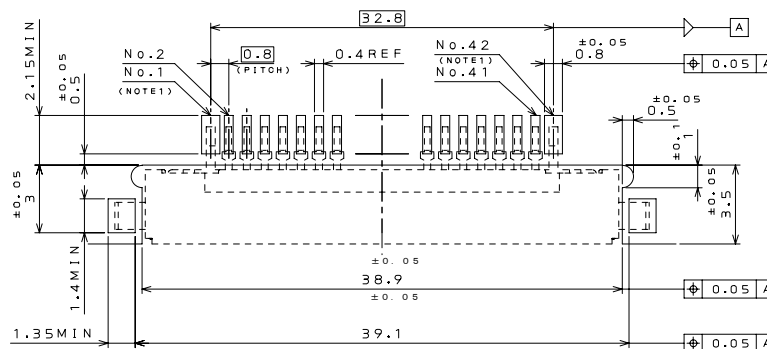
None: Standard Type (R: Reverse Type)



Unit: mm



**Drawing when mated  
(for reference)**



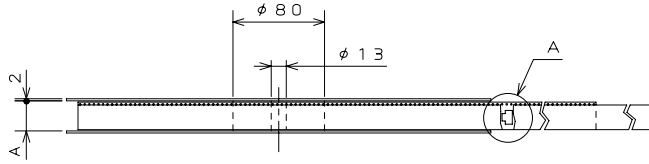
**Recommended dimension of board**

Ordering Information

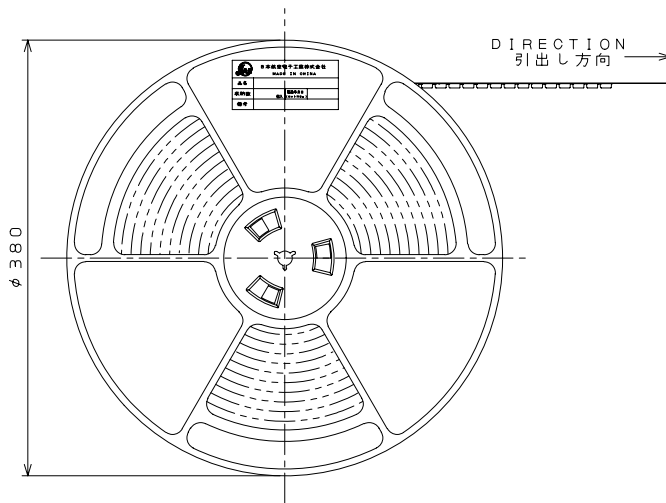
Receptacle Connector  
Emboss Product (SJ107067)

FI-NXB 40 SL - HF10 - R3000

R: Embossed Reel: 3000pcs.



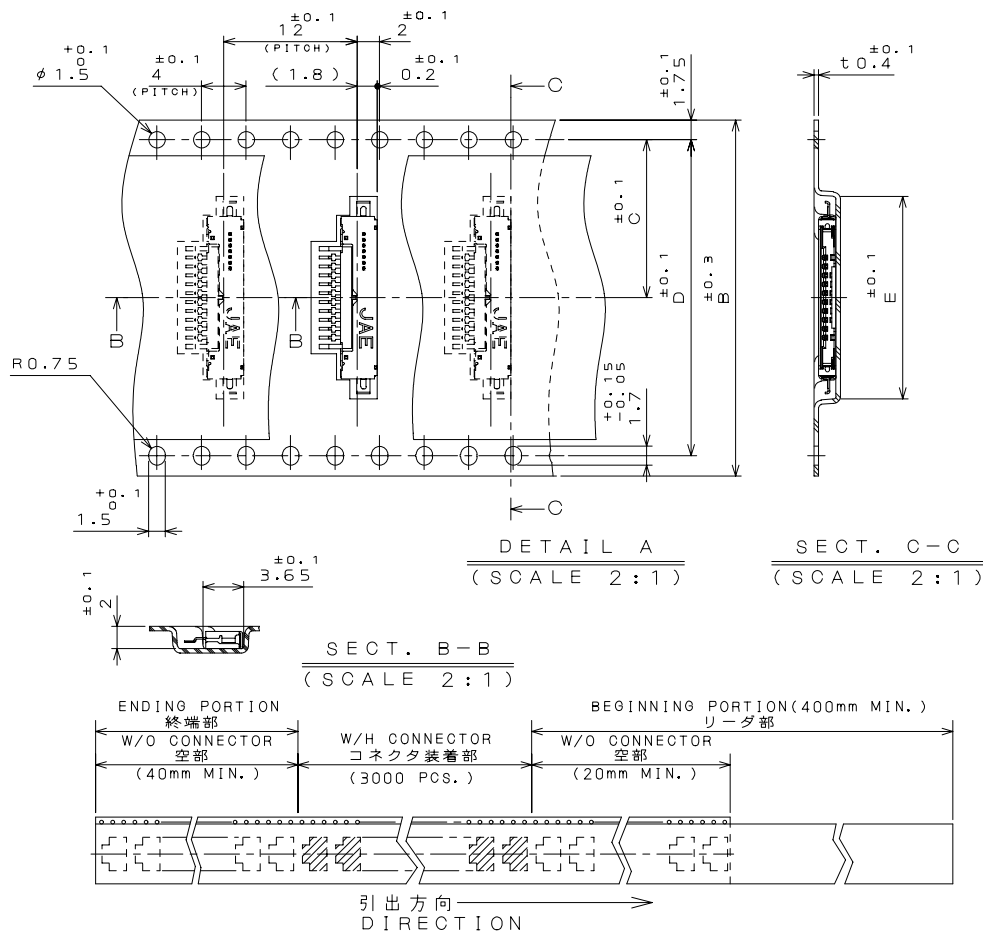
Unit: mm



 日本航空電子工業株式会社 MADE IN JAPAN	
品名	FI-NXB40SL-HF10-R3000
収納数	3000 個入 (ロットNO.)
備考	TB * * 12

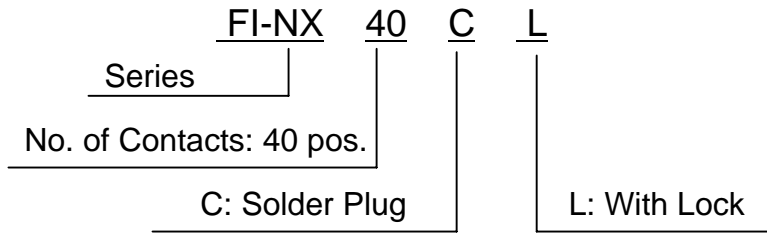
TABLE 1

NO.OF CONTACT	A	B	C	D	E
40	58	56	26.2	52.4	38.8

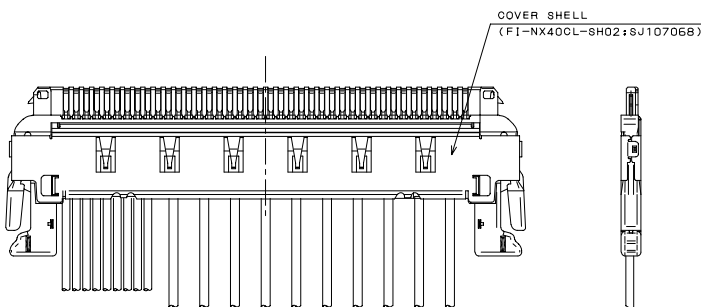
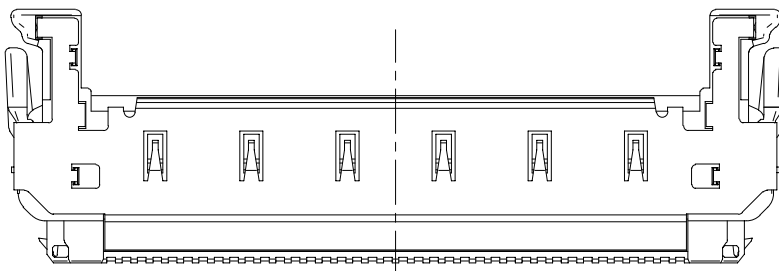
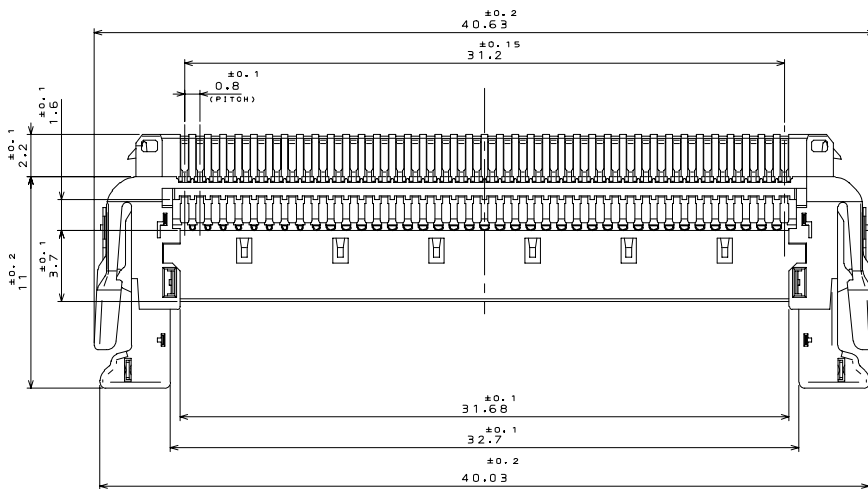


Ordering Information

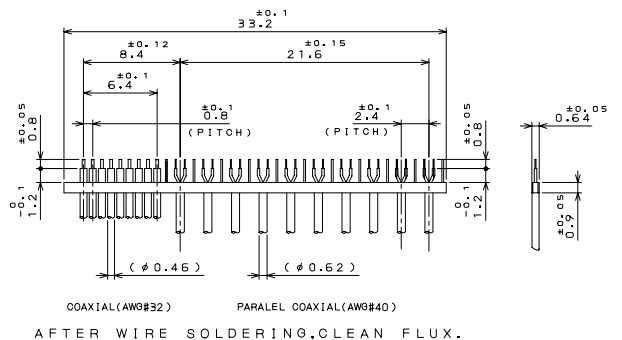
Plug Connector (SJ107068)



Unit: mm



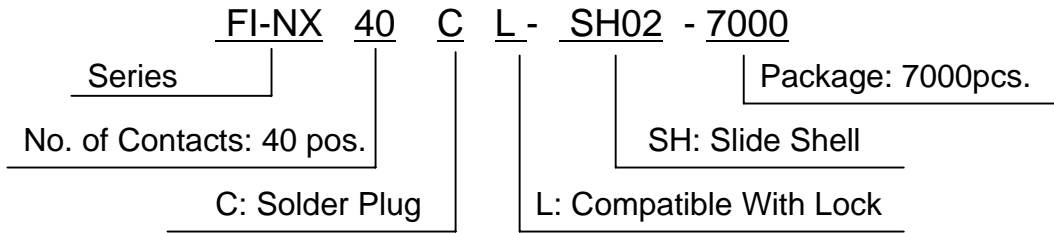
Drawing when cable is mated  
(for reference)



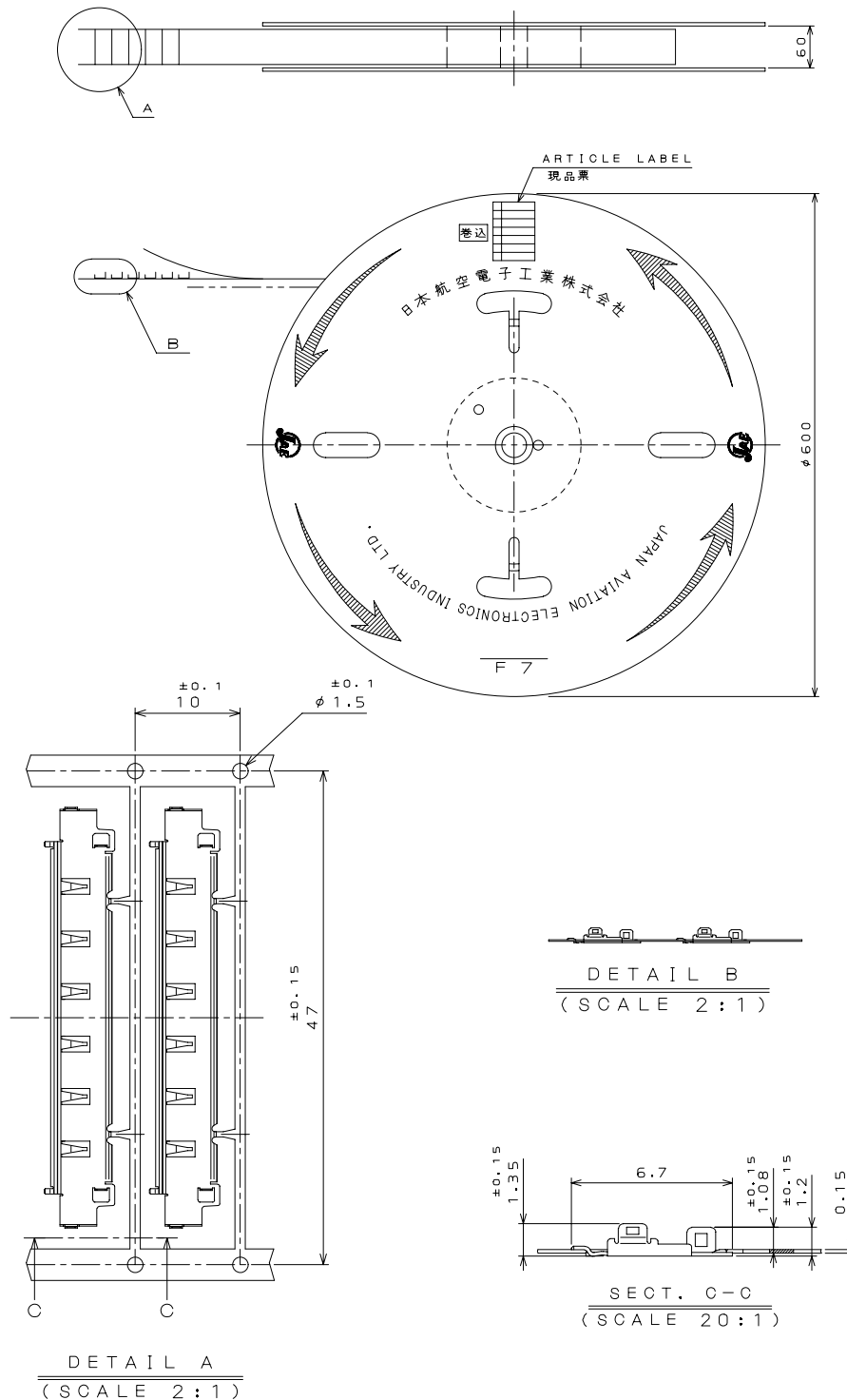
Applicable wire processing dimensions  
(for reference)

Ordering Information

Plug Connector Slide Shell (SJ107069)

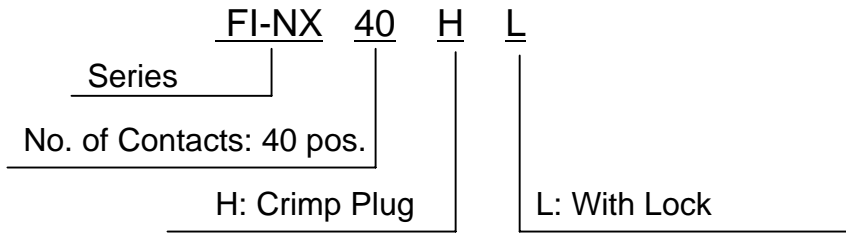


Unit: mm

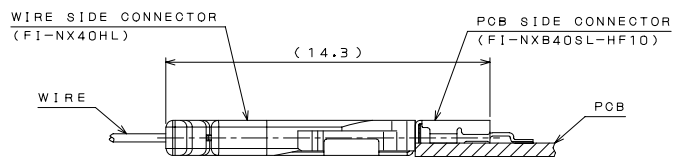
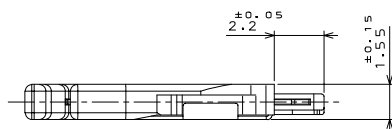
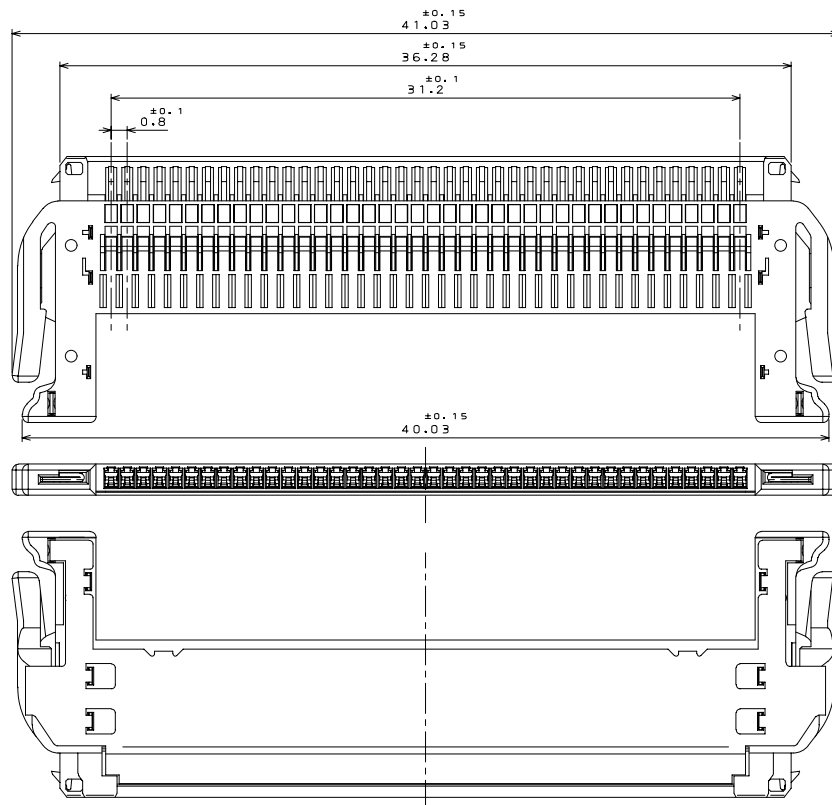


Ordering Information

Plug Connector (SJ107370)



Unit: mm



Drawing when mated (for reference)



Ordering Information

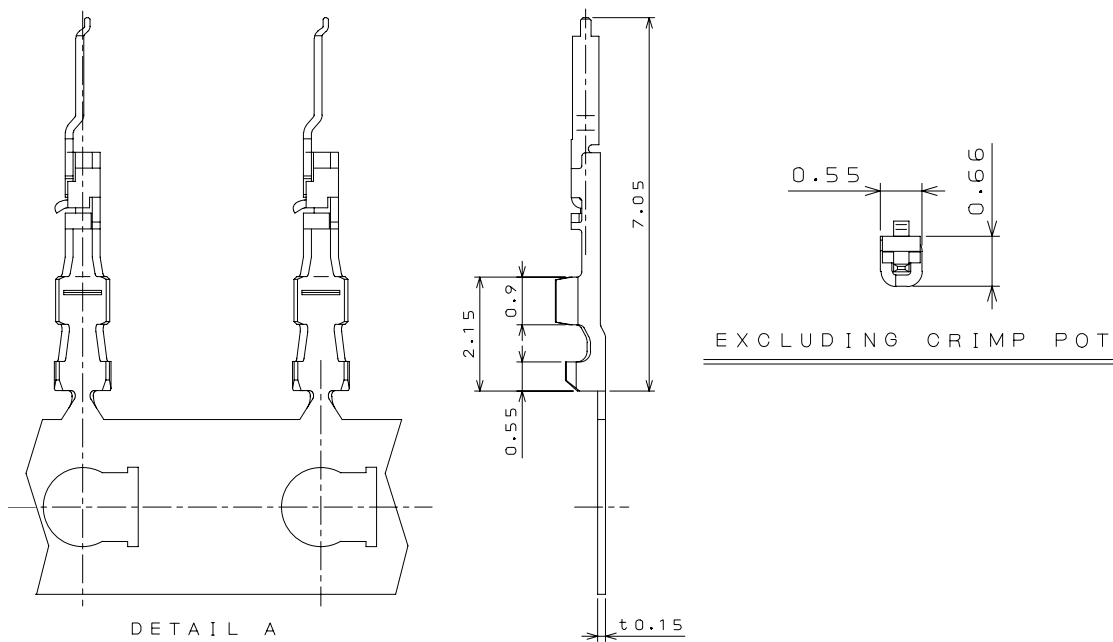
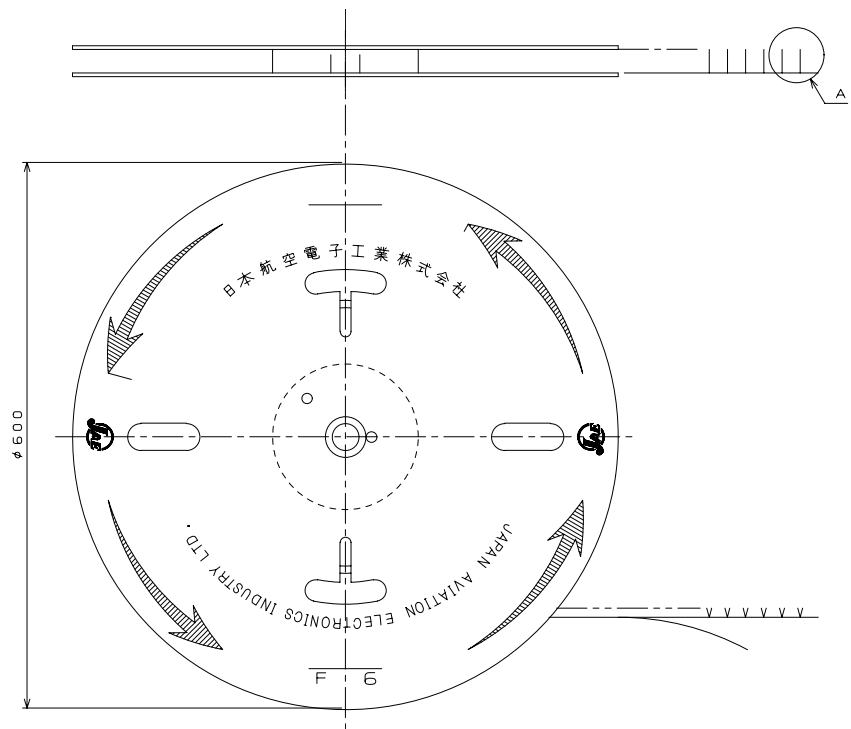
Plug Crimp Contact (SJ107371)

Series	FI-NX	C3	1	15000	Package: 15000pcs.
	C3: Crimp Contact		1: Au Plating on Contact Area		

Applicable Wire: 30 to 36 AWG, twisted pair

Coated Diameter: 0.45 to 0.50 mm dia.

Unit: mm



Related Information
---------------------

-Specifications(JACS): JACS-10393

-Specifications(JACS) Crimp: JACS-10393-2

**NEW**

-Handling Instructions(JAHL): JAHL-10393

-Handling Instructions(JAHL) Crimp: JAHL-10393-2

**NEW**

## **Japan Aviation Electronics Industry, Limited**

Product Marketing Division

Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539

Phone: +81-3-3780-2787 FAX: +81-3-3780-2946

**Notice:** Products shown in this leaflet are made for the applications listed below. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information.

Recommended applications: computers, office machines, measuring devices, telecommunication devices (terminals, mobile devices), AV devices, household applications, FA devices, etc.