

HIB series

I/O Connectors

(Conforms to InfiniBand Standard)

Outline

This series of connectors provides high-speed transmission, which support high-speed communications equipment and a large volume of communications data. These connectors conform to InfiniBand Trading Association (IBTA) standard, which is a standard for high-speed communications in next generation equipment. When transmitting signals through I/O connectors, differential signals are utilized, and each pair of signals is shielded. By reducing noise between each signal and from the outside, high-speed transmission rates of 2.5 Gigabytes per second (1.25 GHz) can be achieved.

Features

- Conforms to InfiniBand Trading Association (IBTA) standard.
- High-speed transmission of 2.5 Gigabytes per second (1.25 GHz).
- Achieves a low insertion loss and low crosstalk by shielding each pair of differential signals.
- Assembly of connector and core cable is performed through a PCB, which is available for mounting components for equalization.
- Provides a screw lock type connector conforming ANSI SFF-8470 standard
- The connectors can be used as I/O connectors for high-speed differential signals, which are different from InfiniBand 4X I/O connectors.

Principal Applications

Servers, routers, etc.

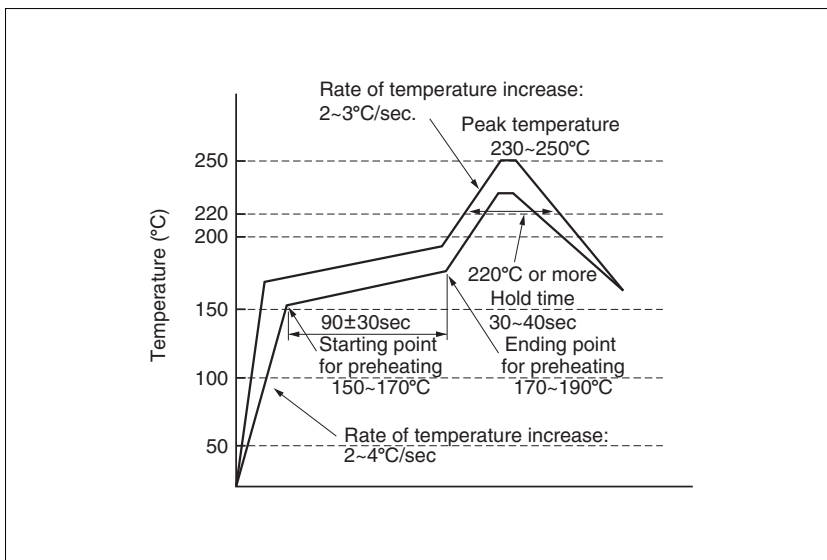
Electrical Characteristics

Connector	HIB-A, B series	
Cable assembly	HIB-HA, HB and HC series	HIB-HE, HF and HG series
Rated voltage	30V AC (r.m.s.)	
Rated current	0.5A/contact	
Insulation resistance	Over 100 megohms, at 100V DC (r.m.s.)	
Dielectric withstanding voltage	200V AC (r.m.s.)	50V AC (r.m.s.)
Contact resistance	80 milliohms or less (total resistance for all contacts of a connector)	

Document Disclaimer

- When placing orders with us, minimum order quantities are set for every product.
- Be sure to contact us before starting preliminary design of PCBs using our connectors.
- The specifications and information shown in the catalog are subject to change without notice.

Reflow temperature profile (for reference purposes)



The reflow temperature profile shown in this drawing is for reference purposes. This profile depends on requirements such as reflow equipment, soldering paste, and PCB size. Thus, this profile may not meet with your specific situation. Please evaluate your PCB-mounting soldering and set your own reflow temperature profile.

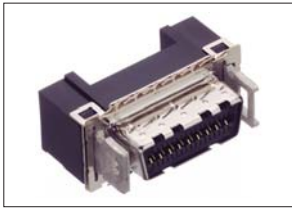
●Applicable products

HIB-A16LFYG()

HIB-B16LFYG()()

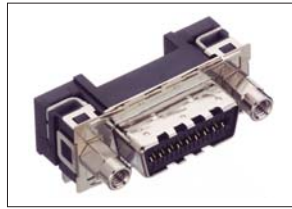
The profile shown in this drawing is applicable only for those products shown above.

Product List



InfiniBand 4X lock-latch type
socket connector
HIB-A16LFYG()

J-66
HIB series...4



InfiniBand 4X lock-screw type
socket connector
HIB-B16LFYG()()

J-67
HIB series...5



InfiniBand 4X lock-latch type
cable assembly
HIB-H()011-()

J-68
HIB series...6



InfiniBand 4X lock-latch type
cable assembly with equalizer
HIB-H()011-()-A()

J-69
HIB series...7



InfiniBand 4X lock-screw type
cable-assembly
HIB-H()012-()

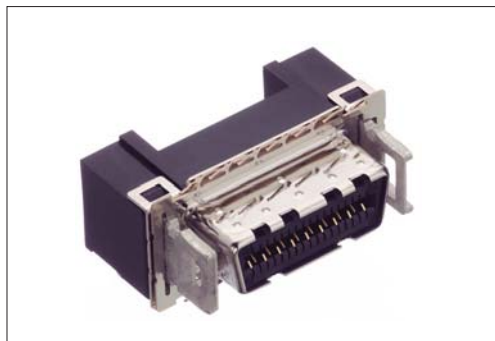
J-70
HIB series...8



InfiniBand 4X lock-screw type
cable-assembly with equalizer
HIB-H()012-()-A()

J-71
HIB series...9

InfiniBand 4X lock-latch type socket connector HIB-A16LFYG()



● Configuration of product Part No.

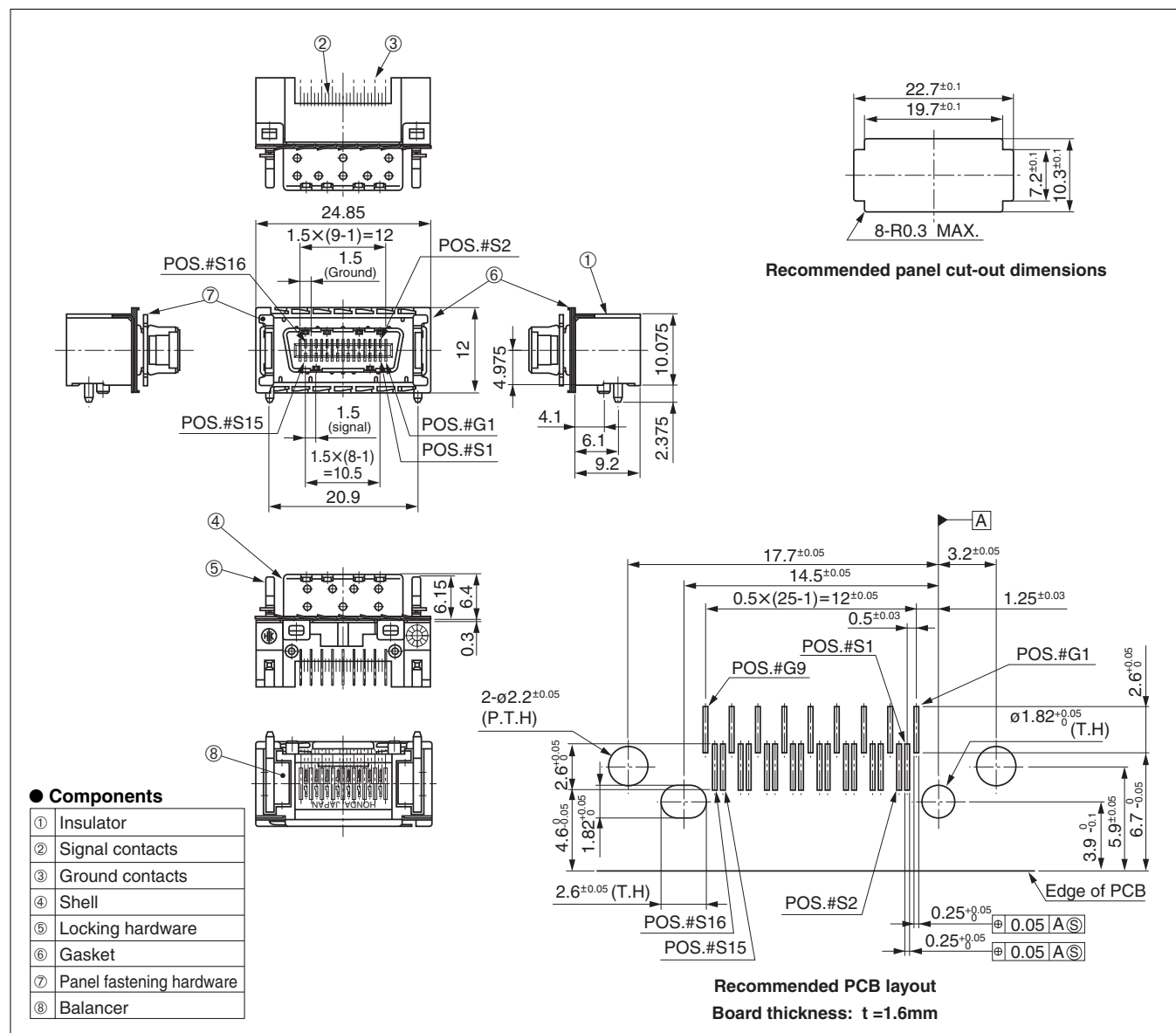
HIB- A 16 LFY G ()

- ① Series name
- ② A: lock-latch type
- ③ No. of contacts: 16
- ④ LFY: Right-angle SMT type, female
- ⑤ Contact plating
G: Gold plate

⑥ Applicable panel thickness

A: 1.0 mm

B: 1.2 mm



Mating connector: HIB-H()011-(), HIB-H()011-()-A()

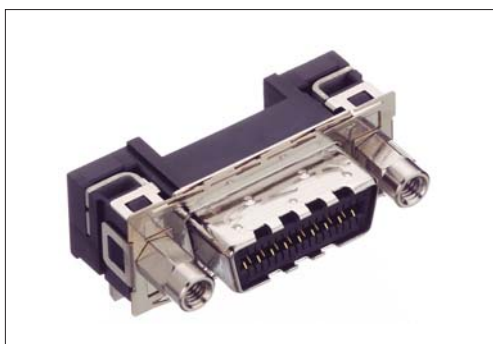
InfiniBand 4X lock-screw type socket connector HIB-B16LFYG() ()

For PCB

Right-angle SMT

RoHS

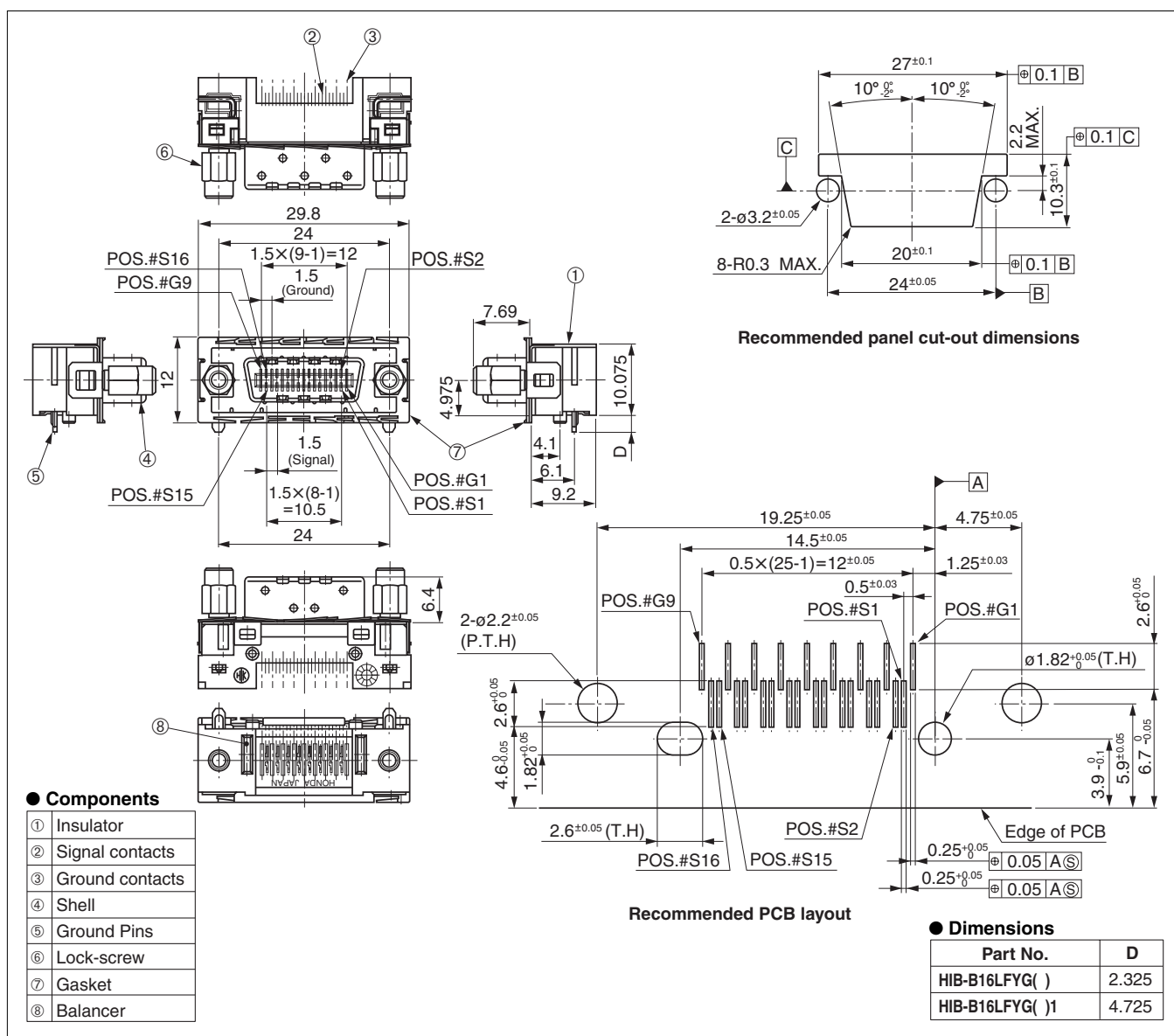
InfiniBand standard



● Configuration of product Part No.

HIB- B 16 LFY G () ()

- | | |
|-------------------------------------|------------------------------|
| ① Series name | ⑥ Applicable panel thickness |
| ② B: Lock screw type | A: 1.0 mm |
| ③ No. of contacts: 16 | B: 1.6 mm |
| ④ LFY: Right-angle SMT type, female | ⑦ Applicable PCB thickness |
| ⑤ Contact plating | Blank: 1.6 mm |
| G: Gold plate | 1 : 4.0 mm |



Mating connector: HIB-H()012-(), HIB-H()012-()-A()

InfiniBand 4X lock-latch type cable assembly HIB-H()011-()

For cable assembly

Straight soldering

RoHS

InfiniBand standard



● Configuration of product Part No.

HIB- H () 011- ()

- ① Series name
- ② For use with specific cable sizes
 - A: AWG#24
 - B: AWG#26
 - C: AWG#28
- ③ Lock-latch type
- ④ Cable length (Refer to the table as shown below.)

CN1		CN2	
S1	_____	S16	_____
S2	_____	S15	_____
S3	_____	S14	_____
S4	_____	S13	_____
S5	_____	S12	_____
S6	_____	S11	_____
S7	_____	S10	_____
S8	_____	S9	_____
S9	_____	S8	_____
S10	_____	S7	_____
S11	_____	S6	_____
S12	_____	S5	_____
S13	_____	S4	_____
S14	_____	S3	_____
S15	_____	S2	_____
S16	_____	S1	_____
G1	_____	G9	_____
G2	_____	G8	_____
G3	_____	G7	_____
G4	_____	G6	_____
G5	_____	G5	_____
G6	_____	G4	_____
G7	_____	G3	_____
G8	_____	G2	_____
G9	_____	G1	_____

Cable-plug housing		Cable-plug housing	
G1	_____	G1	_____
G2	_____	G2	_____
G3	_____	G3	_____
G4	_____	G4	_____
G5	_____	G5	_____
G6	_____	G6	_____
G7	_____	G7	_____
G8	_____	G8	_____
G9	_____	G9	_____

● Part No.

Cable	24AWG	26AWG	28AWG
1m	HIB-HA011-0100	HIB-HB011-0100	HIB-HC011-0100
2m	HIB-HA011-0200	HIB-HB011-0200	HIB-HC011-0200
3m	HIB-HA011-0300	HIB-HB011-0300	HIB-HC011-0300
4m	HIB-HA011-0400	HIB-HB011-0400	HIB-HC011-0400
5m	HIB-HA011-0500	HIB-HB011-0500	—
6m	HIB-HA011-0600	—	—

● Components

①	Cable plug
②	Cable-plug housing
③	Cable

Mating connector: HIB-A16LFYG()

InfiniBand 4X lock-latch type cable assembly with equalizer HIB-H()011-()-A()

For cable assembly

Straight soldering

RoHS

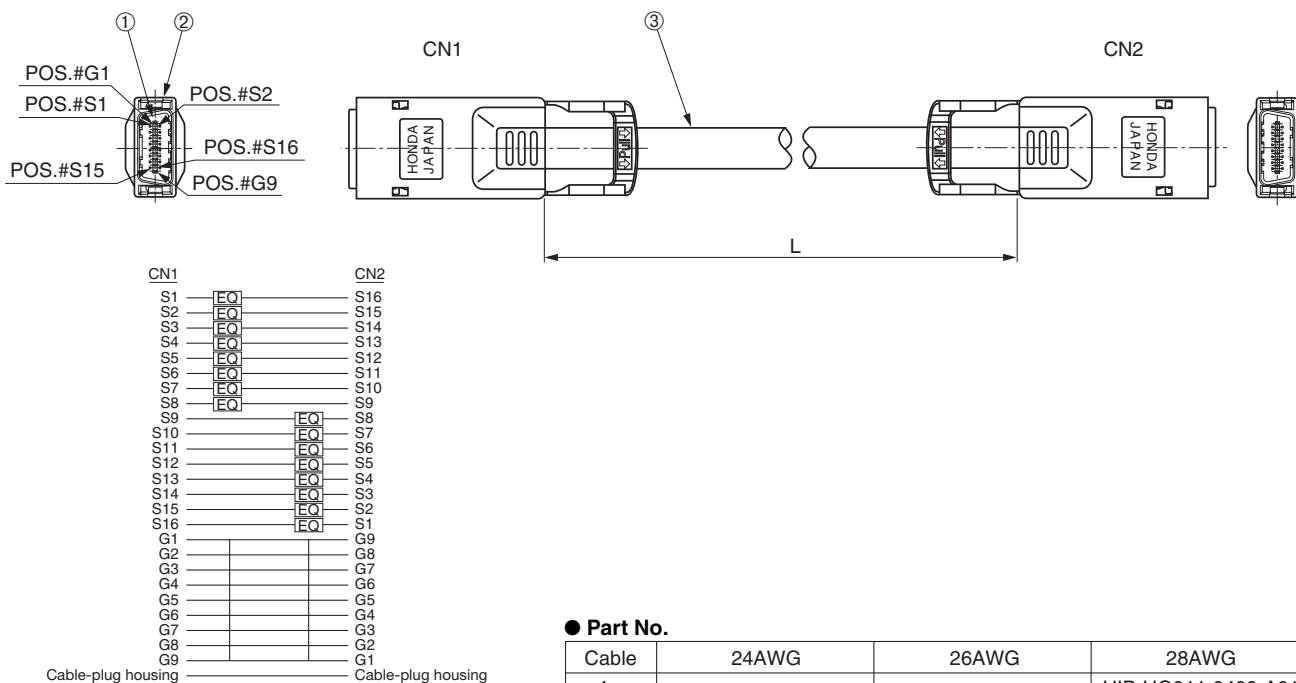
InfiniBand standard



● Configuration of product Part No.

HIB- H () 011- ()- A()

- ① Series name
- ② For use with specific cable sizes
E : AWG#24
F : AWG#26
G : AWG#28
- ③ Lock-latch type
- ④ Cable length (Refer to the table as shown below.)
- ⑤ Equalizer parameter (Refer to the table as shown below.)



● Components

①	Cable plug with equalizer
②	Cable-plug housing
③	Cable

● Part No.

Cable	24AWG	26AWG	28AWG
4m	—	—	HIB-HG011-0400-A01
5m	—	HIB-HF011-0500-A01	HIB-HG011-0500-A02
6m	HIB-HE011-0600-A01	HIB-HF011-0600-A02	HIB-HG011-0600-A03
7m	HIB-HE011-0700-A01	HIB-HF011-0700-A02	—
8m	HIB-HE011-0800-A02	HIB-HF011-0800-A04	—
9m	HIB-HE011-0900-A04	—	—
10m	HIB-HE011-1000-A04	—	—

Mating connector: HIB-A16LFYG()

InfiniBand 4X lock-screw type cable-assembly HIB-H()012-()

For cable assembly

Straight soldering

RoHS

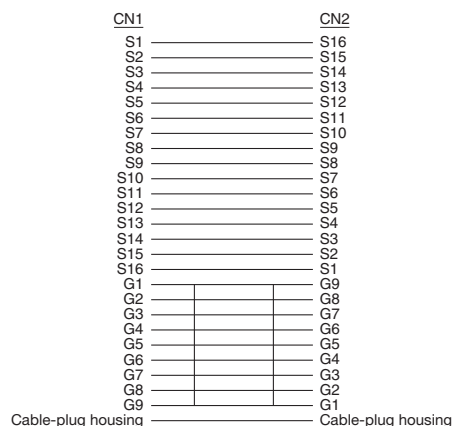
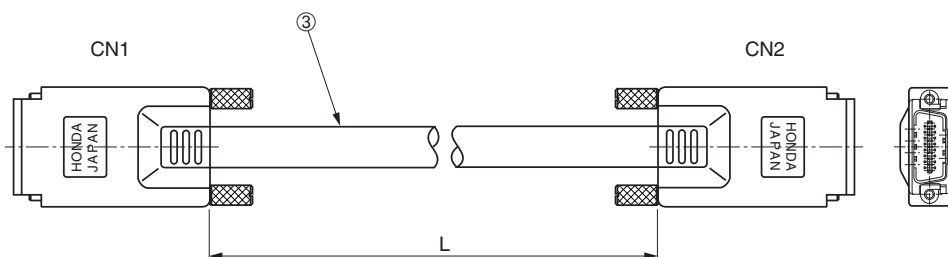
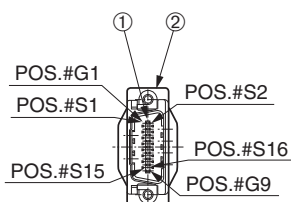
InfiniBand standard



● Configuration of product Part No.

HIB- H () 012- ()

- ① Series name
- ② For use with specific cable sizes
 - A: AWG#24
 - B: AWG#26
 - C: AWG#28
- ③ Lock-latch type
- ④ Cable length (Refer to the table as shown below.)



● Part No.

Cable	24AWG	26AWG	28AWG
1m	HIB-HA012-0100	HIB-HB012-0100	HIB-HC012-0100
2m	HIB-HA012-0200	HIB-HB012-0200	HIB-HC012-0200
3m	HIB-HA012-0300	HIB-HB012-0300	HIB-HC012-0300
4m	HIB-HA012-0400	HIB-HB012-0400	HIB-HC012-0400
5m	HIB-HA012-0500	HIB-HB012-0500	—
6m	HIB-HA012-0600	—	—

● Components

①	Cable plug
②	Cable-plug housing
③	Cable

Mating connector: HIB-B16LFYG() ()

InfiniBand 4X lock-screw type cable-assembly with equalizer HIB-H()012-()-A()

For cable assembly

Straight soldering

RoHS

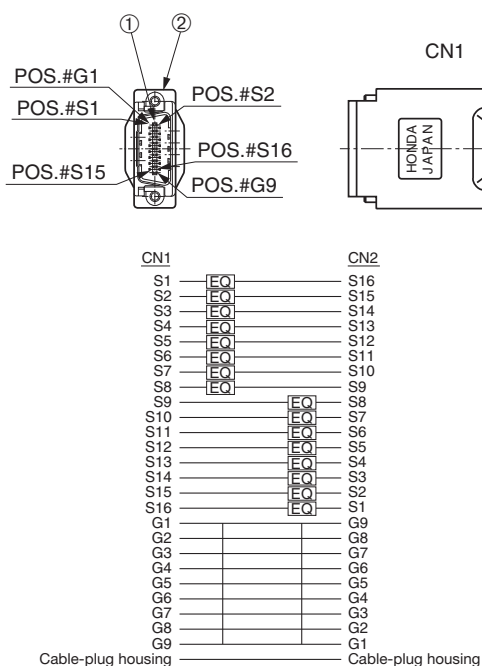
InfiniBand standard



● Configuration of product Part No.

HIB- H () 012- ()- A()

- ① Series name
- ② For use with specific cable sizes
E : AWG#24
F : AWG#26
G : AWG#28
- ③ Lock-latch type
- ④ Cable length (Refer to the table as shown below.)
- ⑤ Equalizer parameter (Refer to the table as shown below.)



● Components

①	Cable plug with equalizer
②	Cable-plug housing
③	Cable

● Part No.

Cable	24AWG	26AWG	28AWG
4m	—	—	HIB-HG012-0400-A01
5m	—	HIB-HF012-0500-A01	HIB-HG012-0500-A02
6m	HIB-HE012-0600-A01	HIB-HF012-0600-A02	HIB-HG012-0600-A03
7m	HIB-HE012-0700-A01	HIB-HF012-0700-A02	—
8m	HIB-HE012-0800-A02	HIB-HF012-0800-A04	—
9m	HIB-HE012-0900-A04	—	—
10m	HIB-HE012-1000-A04	—	—

Mating connector: HIB-B16LFYG() ()