



Compact Push-Pull Circular Connector

CONNECTOR

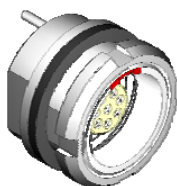
MB-0101-4

August 2009

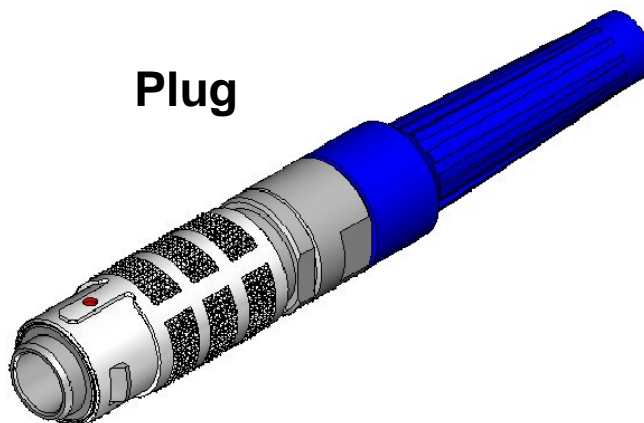
JB5 Series

| |
|-----------------------|
| RoHS Compliant |
|-----------------------|

Receptacle



Plug



<<Outline>>

The JB5 Series connectors are small circular connectors with IP68 waterproof rating and a push-pull mating structure to enable easy insertion and removal. They have high environmental durability and user-friendly designs that can be widely used in medical, measurement, and communication equipment, as well as handheld PCs, scanners and other small equipment.

Features

- Waterproof and dustproof rating: IP68 protection level (when mated, and for the receptacle alone)
- Small 14.8mm diameter available for connectors up to 8 contacts (plug outside diameter: 11mm dia.)
- Push-pull mating structure enables easy one-handed insertion and removal
- Audible and tactile “click” confirms secure locking when mating
- Metal outer parts and ground terminal in the receptacle ensure excellent shielding
- Mis-mating can be visibly prevented with color variation of plug boots
- Connector mating life: 5,000 times

General Specifications

| | | | | | |
|--------------------------|--|-------------|--------|-------------|--------|
| No. of Contacts | 3 pos. | 4 pos. | 5 pos. | 6 pos. | 8 pos. |
| Rated Current | 3A per pos. | | | 2A per pos. | |
| Rated Voltage | 320VAC | | | 200VAC | |
| Operating Temperature | -55 Deg. C to +85 Deg. C | | | | |
| Water-proof | IP68 (when mated and receptacle alone) | | | | |
| Durability | 5000 mating cycles | | | | |
| Applicable Wire | 22 AWG max. | 24 AWG max. | | 28 AWG max. | |
| Applicable Dia. of Cable | Max. outer dia. of cable: 4.5 to 5mm | | | | |

| |
|------------------------|
| Materials and Finishes |
|------------------------|

<Receptacle>

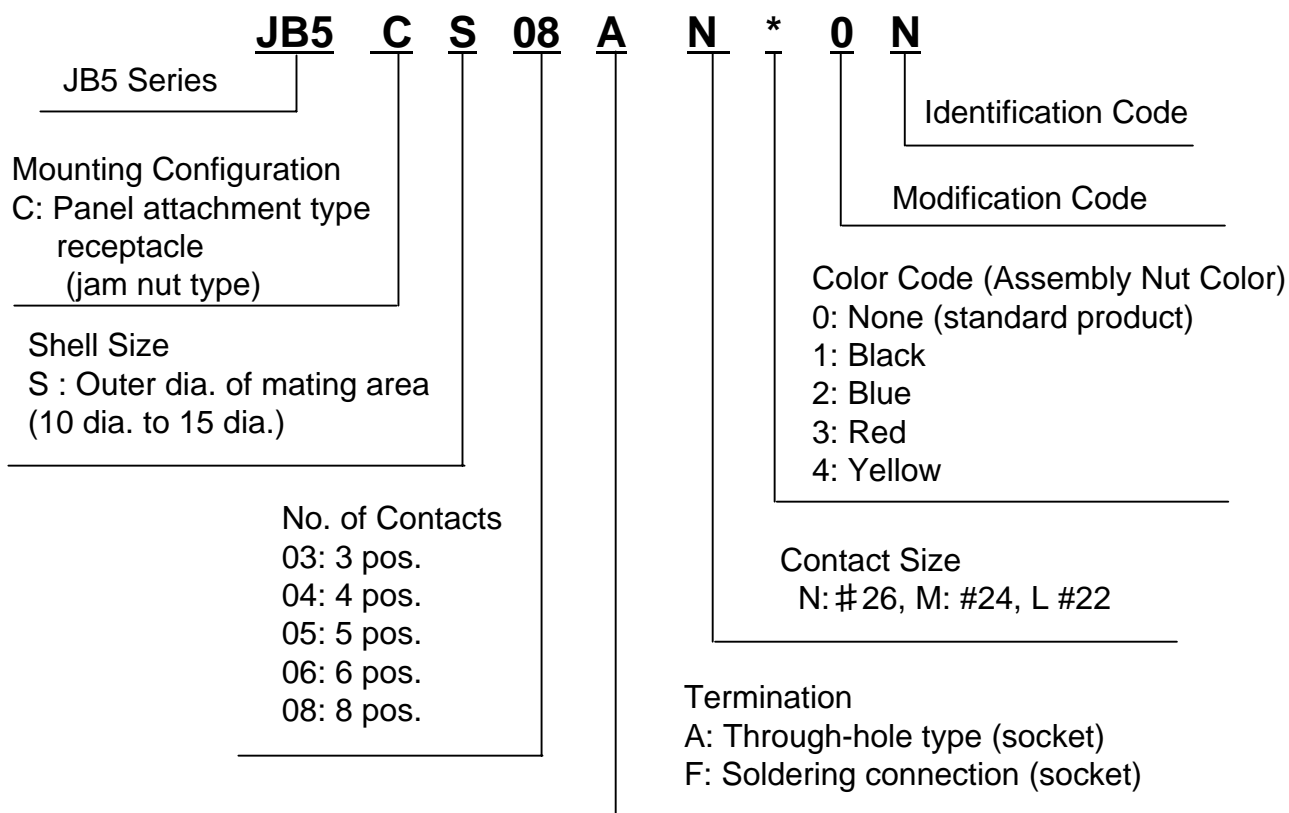
| Component | Material / Finish |
|----------------|---------------------------------------|
| Socket Contact | Copper alloy / Au plating over Ni |
| Shell | Copper alloy / Chrome plating over Cu |
| Insulator | Glass filled nylon |
| Assembly Nut | Copper alloy / Chrome plating over Cu |
| Gasket | Silicon rubber |
| “O”Ring | Nitrile rubber |
| Ground Pin | Copper alloy / Sn plating |
| Dust Cap | EPDM rubber |

<Plug>

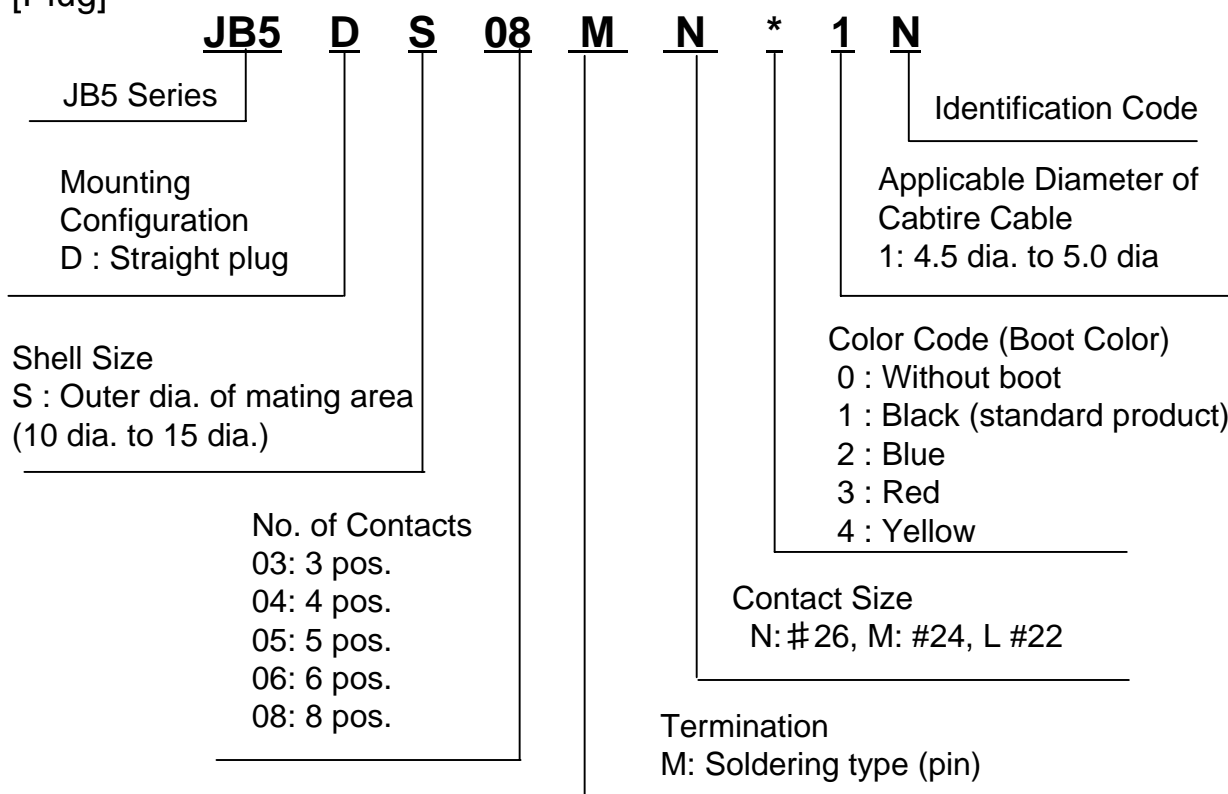
| Component | Material / Finish |
|------------------|---------------------------------------|
| Pin Contact | Copper alloy / Au plating over Ni |
| Barrel | Zinc Alloy / Ni plating over Cu |
| Insulator | Glass filled nylon |
| Coupling Nut | Zinc Alloy / Chrome plating over Cu |
| Spacer | Copper alloy / Ni plating |
| Lock Spring | Copper alloy / Ni plating over Cu |
| Shield Sleeve | Copper alloy / Ni plating |
| Bushing | EPDM rubber |
| Ground Nut | Copper alloy / Chrome plating over Cu |
| Clamp | Copper alloy / Ni plating |
| Boot | Polyester elastomer |
| Outer Boot Clamp | Polyacetal |

Ordering Information

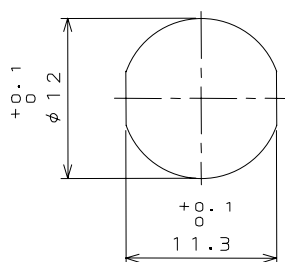
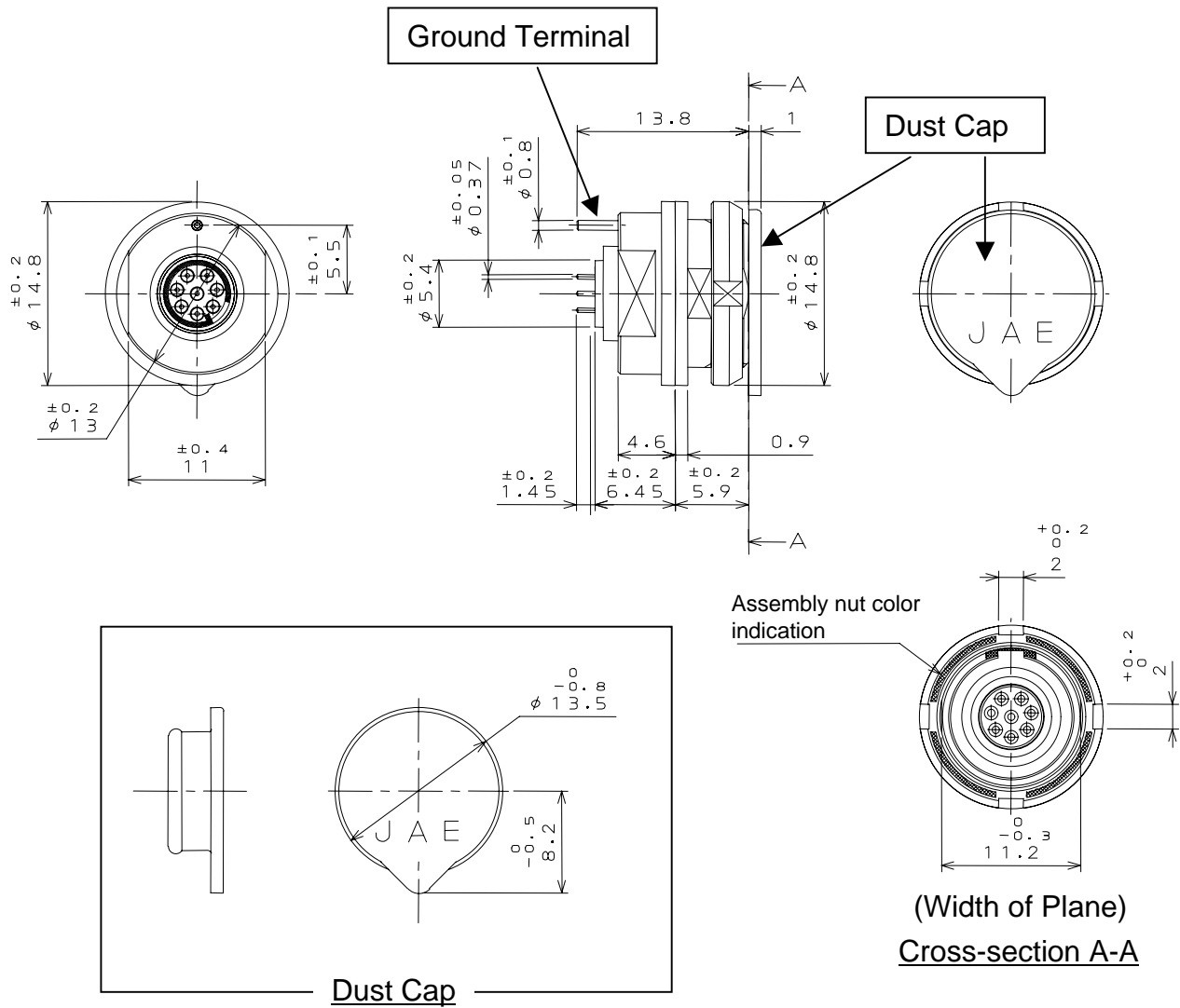
[Receptacle]



[Plug]



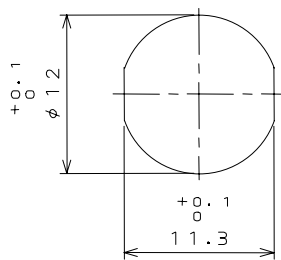
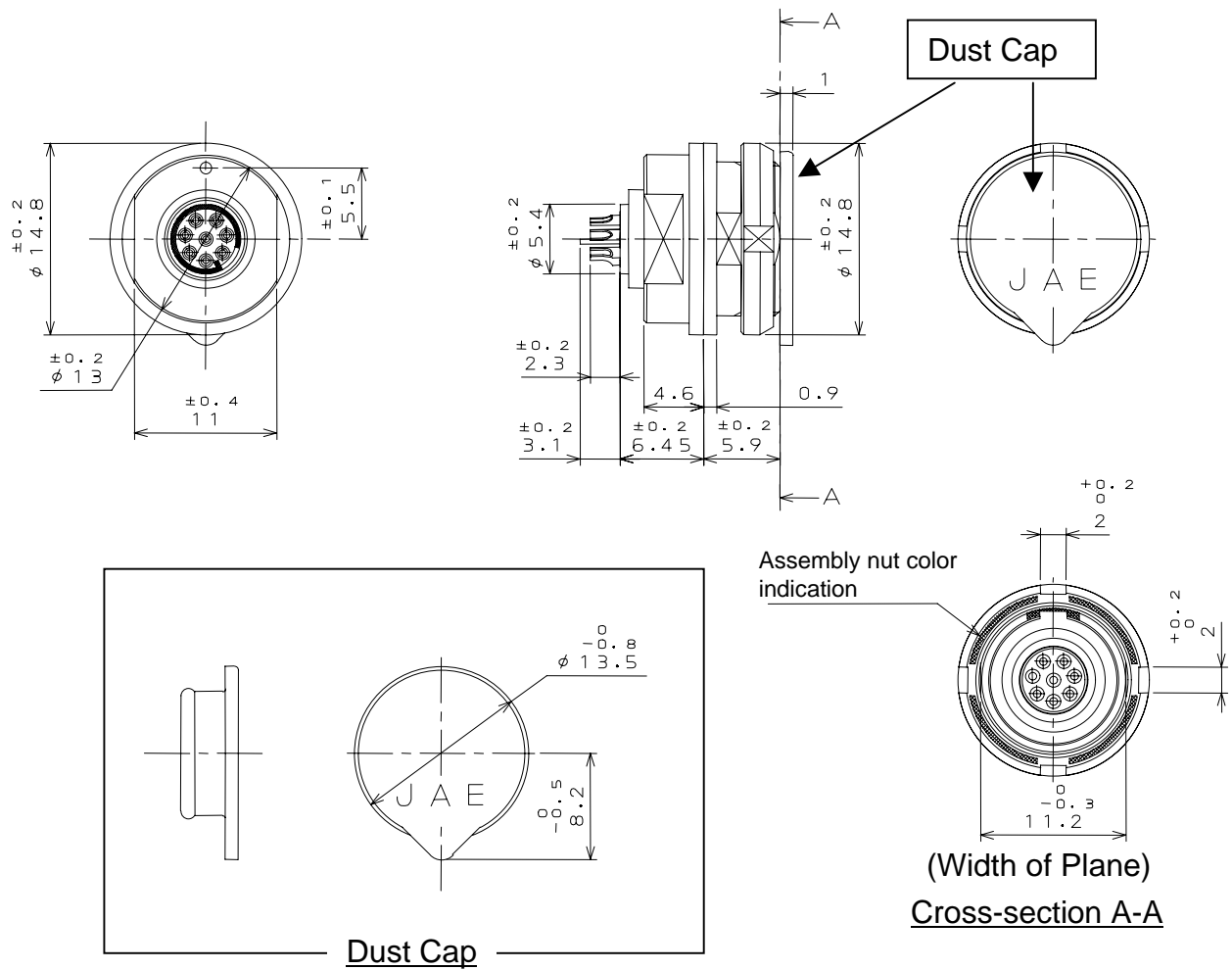
Jam Nut Receptacle (Through Hole Type)



Panel Cutout (for reference)
Panel thickness: 2.5mm max.

| No. of Contacts | Part Number | SJ Drawing |
|-----------------|---------------|------------|
| 3 pos. | JB5CS03AL *0N | SJ104321 |
| 4 pos. | JB5CS04AM *0N | SJ104324 |
| 5 pos. | JB5CS05AM *0N | SJ104327 |
| 6 pos. | JB5CS06AN *0N | SJ104330 |
| 8 pos. | JB5CS08AN *0 | SJ100060 |

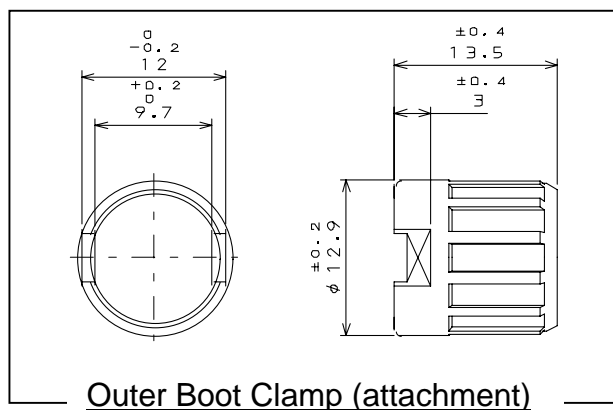
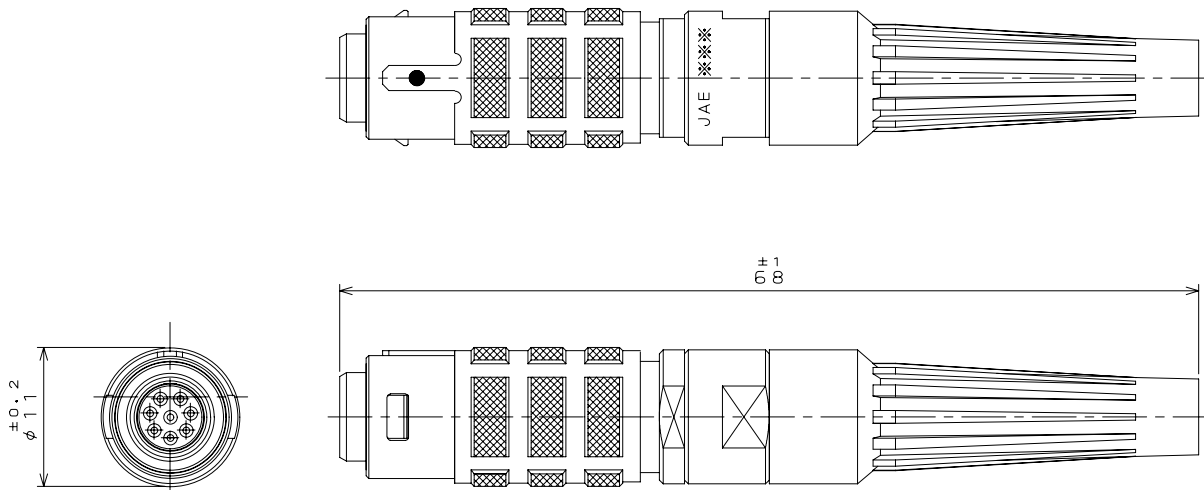
Jam Nut Receptacle (Soldering Connection Type)



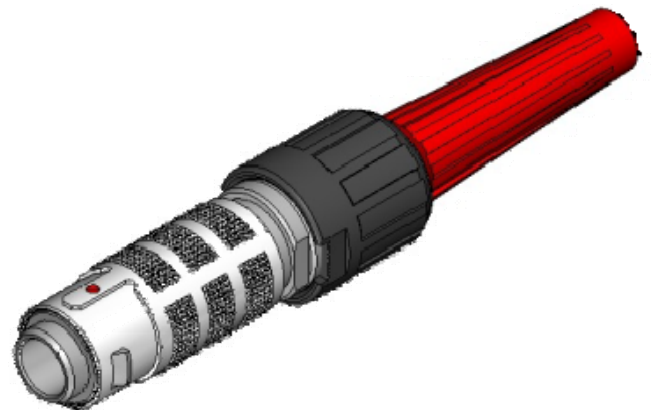
Panel Cutout (for reference)
Panel thickness: 2.5mm max.

| No. of Contacts | Part Number | SJ Drawing |
|-----------------|---------------|------------|
| 3 pos. | JB5CS03FL *0N | SJ104322 |
| 4 pos. | JB5CS04FM *0N | SJ104325 |
| 5 pos. | JB5CS05FM *0N | SJ104328 |
| 6 pos. | JB5CS06FN *0N | SJ104331 |
| 8 pos. | JB5CS08FN *0 | SJ104333 |

Plug



Outer Boot Clamp (attachment)



Outer boot clamp attached

[Outer Clamp (attachment)]

<Usage>

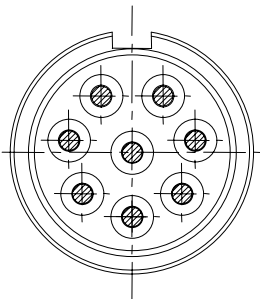
The outer boot clamp can be used to reinforce and prevent boot rising or disengagement caused by severe cable bending, etc.

The customer may use this depending on the usage and applications.

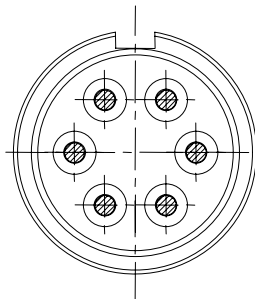
<Note>

Once the outer clamp is placed on the connector, it cannot be removed.

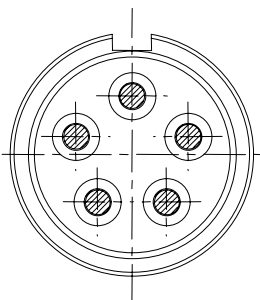
| No. of Contacts | Part Number | SJ Drawing |
|-----------------|---------------|------------|
| 3 pos. | JB5DS03ML *1N | SJ104323 |
| 4 pos. | JB5DS04MM *1N | SJ104326 |
| 5 pos. | JB5DS05MM *1N | SJ104329 |
| 6 pos. | JB5DS06MN *1N | SJ104332 |
| 8 pos. | JB5DS08MN *1 | SJ100061 |

Contact Array**8 pos.**

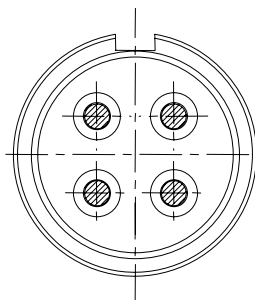
#26 x 8 pos
Rated current: 2A
Rated voltage: 200VAC

6 pos.

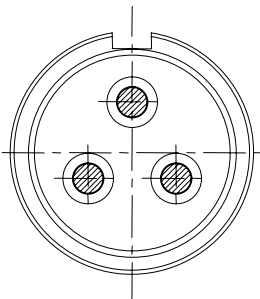
#26 x 6 pos
Rated current: 2A
Rated voltage: 200VAC

5 pos.

#24 x 5 pos
Rated current: 2A
Rated voltage: 200VAC

4 pos.

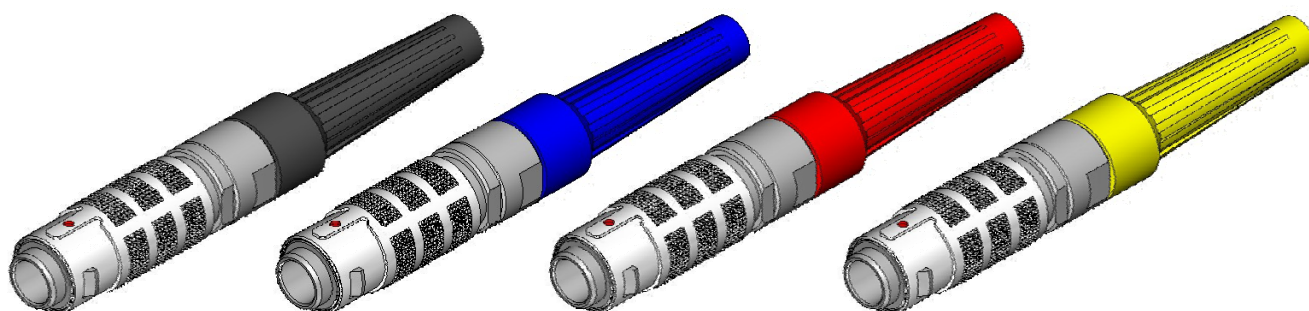
#24 x 4 pos
Rated current: 2A
Rated voltage: 200VAC

3 pos.

#22 x 3 pos
Rated current: 3A
Rated voltage: 200VAC

[Boots color variation]

Black, Blue, Red, Yellow (4 colors)



Technical Information

| | Japanese | English |
|-----------------------|------------|--------------|
| Specifications | JACS-50001 | JACS-50001-E |
| Handling Instructions | JAHL-50001 | JAHL-50001-E |

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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.