

# DeviceNet Mini-Style Connectors

## CM03 Series



### ◆ OUTLINE

The CM03 series is the connector designed in accordance with DeviceNet Mini Style, an official standard of ODVA (Open DeviceNet Vendor Association, Inc.) for use in a DeviceNet communication network. The DeviceNet communication network provides connection among not only simple industrial devices such as sensor, actuator, electrical and electronic devices but also higher-level of devices such as control equipment. The CM03 series is IP67 rated for protection against moisture, oil and dust. It can be used in harsh environmental conditions. The connectors are provided with a pre-mating contact which is a first make-last break contact to protect the circuit. When mated, the pre-mating contact is connected first before the other contacts are disconnected last when dismated.

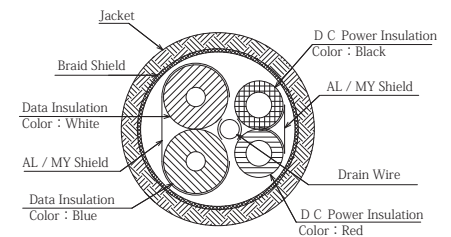


### ◆ FEATURES

- C-UL certified
  - Protection from wiring errors by color-coding the contact holder with red, white, blue and black
  - Miswiring prevention : "Red, black, white and blue" are shown to a contact holder.
- No indication for drain wire. [Applicable P/N : CM03-P5S, CM03-J5P]

### ◆ SPECIFICATIONS

|                                 |                              |
|---------------------------------|------------------------------|
| Rated Current                   | 8A/Contact                   |
| Rated Voltage                   | 24V DC                       |
| Dielectric Withstanding Voltage | 500V AC(r.m.s.) for 1 minute |
| Insulation Resistance           | 1,000 MΩ Min. at 250V DC     |
| Operating Temperature Range     | - 40°C to +85°C              |
| Waterproof                      | IP67 when mated              |
| No. of Contacts                 | 4 and 5                      |



### Applicable Cable

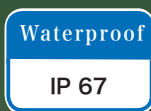
- Conductor size : AWG14 to AWG18
- Outside Dia. : φ 7mm to φ 12mm

### ◆ MATERIAL/FINISH



| Item            | Plug (With Socket Contacts) | Jack (With Pin Contacts)    |
|-----------------|-----------------------------|-----------------------------|
| Front Insulator | Synthetic Rubber/Black      | Synthetic Rubber/Black      |
| Rear Insulator  | Plastic(UL94V-0)/Black      | Plastic(UL94V-0)/Black      |
| Gasket          | Synthetic Rubber/Black      |                             |
| Coupling Ring   | Zinc Alloy/Nickel Plating   | Zinc Alloy/Nickel Plating   |
| Contact         | Copper Alloy/Gold Plating   | Copper Alloy/Gold Plating   |
| Retainer Ring   | Copper Alloy/Nickel Plating | Copper Alloy/Nickel Plating |
| O-Ring          | Synthetic Rubber/Black      | Synthetic Rubber/Black      |
| Contact Holder  | Plastic(UL94V-0)/Black      | Plastic(UL94V-0)/Black      |
| Back Shell      | Plastic(UL94V-0)/Black      | Plastic(UL94V-0)/Black      |
| Cable Holder    | Plastic(UL94V-0)/White      | Plastic(UL94V-0)/White      |
| Bushing         | Synthetic Rubber/Black      | Synthetic Rubber/Black      |
| Clamp Nut       | Plastic(UL94V-0)/Black      | Plastic(UL94V-0)/Black      |

| Item                  | Receptacle (With Pin Contacts) | Plug Receptacle (With Socket Contacts) |
|-----------------------|--------------------------------|--|
| Insulator             | Synthetic Rubber/Black         | Synthetic Rubber/Black                 |
| Gasket(Mating Side)   |                                | Synthetic Rubber/Black                 |
| Contact               | Copper Alloy/Gold Plating      | Copper Alloy/Gold Plating              |
| Shell                 | Zinc Alloy/Nickel Plating      | Zinc Alloy/Nickel Plating              |
| Nut                   | Copper Alloy/Nickel Plating    | Zinc Alloy/Nickel Plating              |
| Gasket(Mounting Side) | Synthetic Rubber/Black         | Synthetic Rubber/Black                 |



## ▶ Configuratin of Connectors for Crimp Contacts

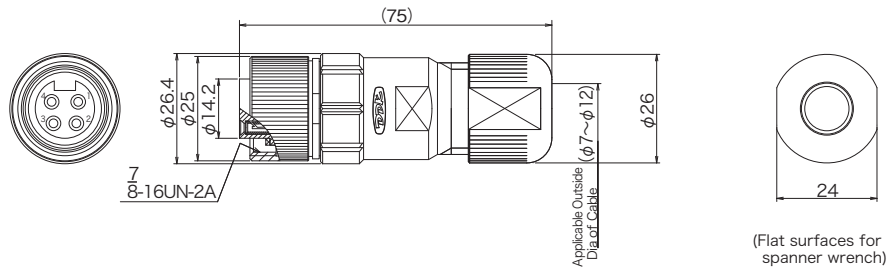
### Plug

(With Socket Contacts)

- 4 pieces or 5 pieces of unassembled socket contacts to be supplied together with connectors
- Crimp termination type.

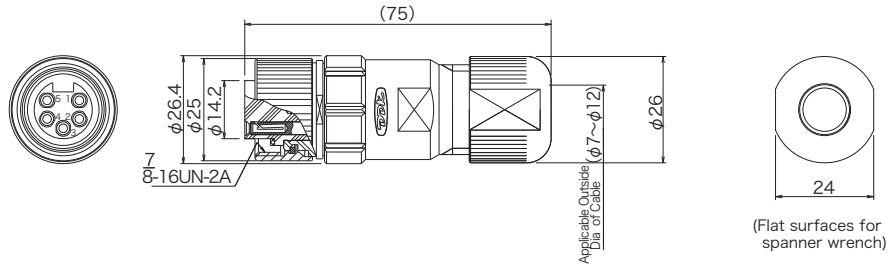
#### P/N : CM03-P4S

(4 positions for power)



#### P/N : CM03-P5S

(5 positions for signal)



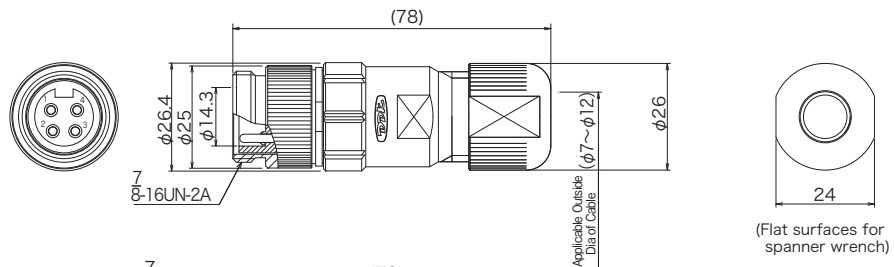
### Jack

(With Pin Contacts)

- 4 pieces or 5 pieces of unassembled socket contacts to be supplied together with connectors
- Crimp termination type.

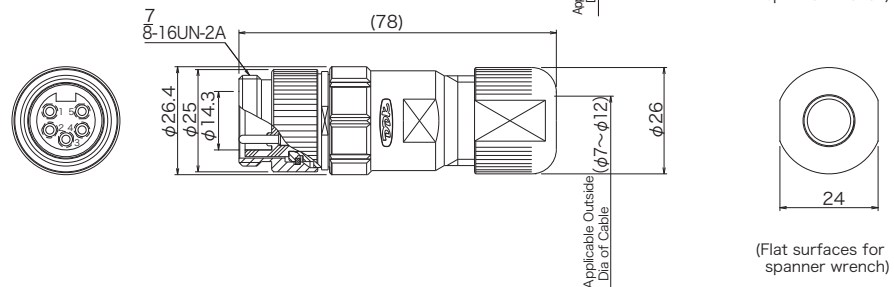
#### P/N : CM03-J4P

(4 positions for power)



#### P/N : CM03-J5P

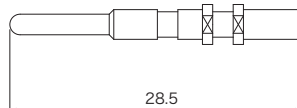
(5 positions for signal)



## ◆ CONFIGURATION OF CRIMP CONTACTS

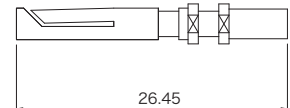
### Pin Contacts

P/N : CM03-J-PC



### Socket Contacts

P/N : CM03-P-SC



## ◆ CRIMP TOOL

- A crimp tool should be needed for plugs and jacks.

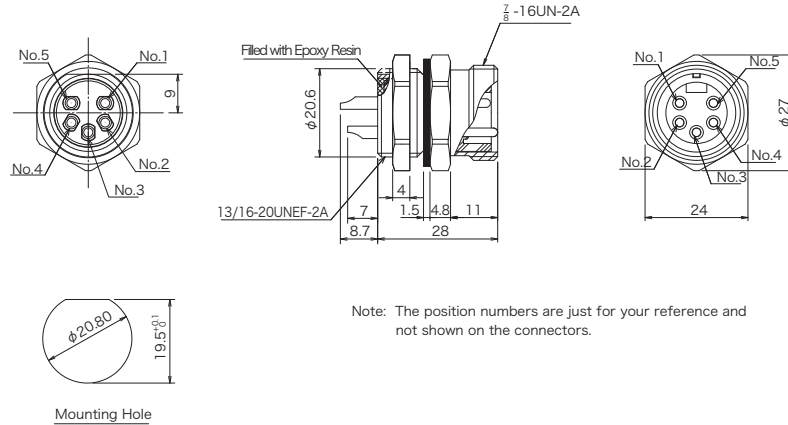
| Item                |                            | P/N          |
|---------------------|----------------------------|--------------|
| A Set of Crimp Tool |                            | 357J-22483   |
| Contents            | Hand Tool                  | 357J-12610   |
|                     | Locator                    | 357J-22484   |
|                     | Inspection Gauge for AWG18 | 357J-22276-1 |
|                     | Inspection Gauge for AWG14 | 357J-22276-2 |



## ▶ Receptacle With Pin Contacts

### Soldering Type

P/N : CM03-R5P-S-CF



## ▶ Plug Receptacle With Socket Contacts

### Soldering Type

P/N : CM03-PR5S-S-CF

