

# DeviceNet Mini-Style Connectors

## CM03 Series

DDK Ltd.

### ◆ 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 premating contact which is a first make-last break contact to protect the circuit. When mated, the premating contact is connected first before the other contacts are disconnected last when dismated.



Conforming Standard  
DeviceNet

Waterproof  
IP 67

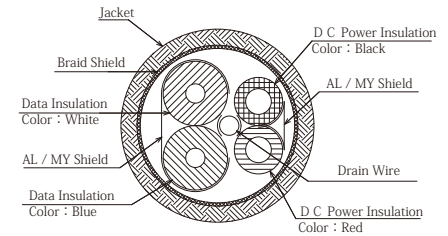
### ◆ FEATURES

- 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]

Lock Type  
Threaded Coupling

### ◆ 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

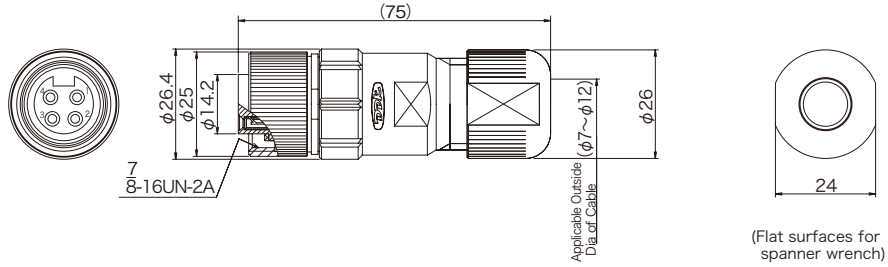
**Plug**

(With Socket Contacts)

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

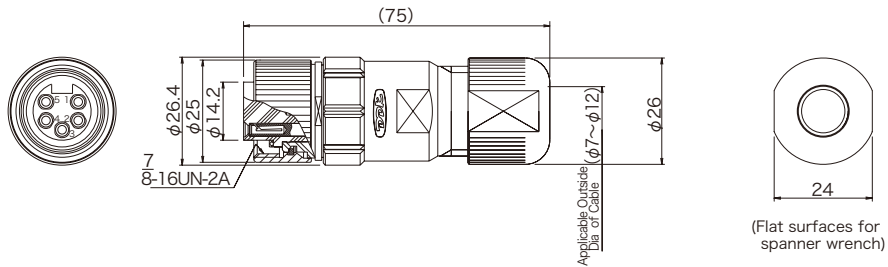
P/N : CM03-P4S(R1)

(4 positions for power)



P/N : CM03-P5S(R1)

(5 positions for signal)



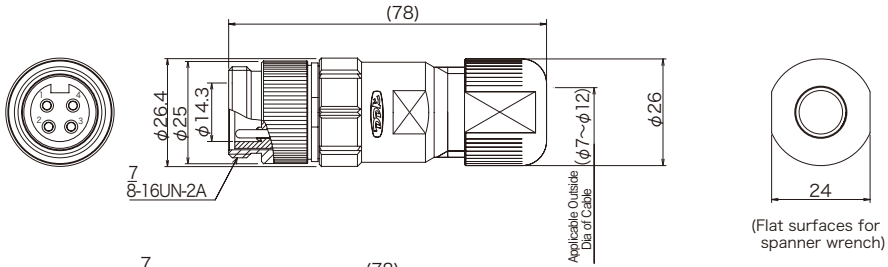
**Jack**

(With Pin Contacts)

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

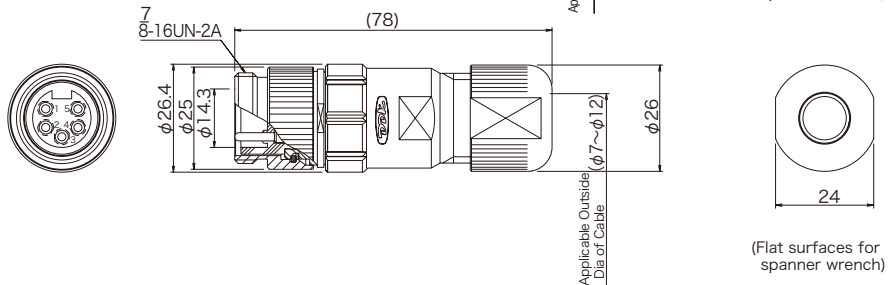
P/N : CM03-J4P(R1)

(4 positions for power)



P/N : CM03-J5P(R1)

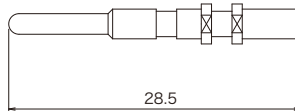
(5 positions for signal)



◆ CONFIGURATION OF CRIMP CONTACTS

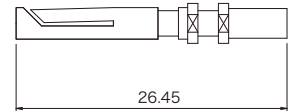
**Pin Contacts**

P/N : CM03-J-PC



**Socket Contacts**

P/N : CM03-P-SC



◆ CRIMP TOOL

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

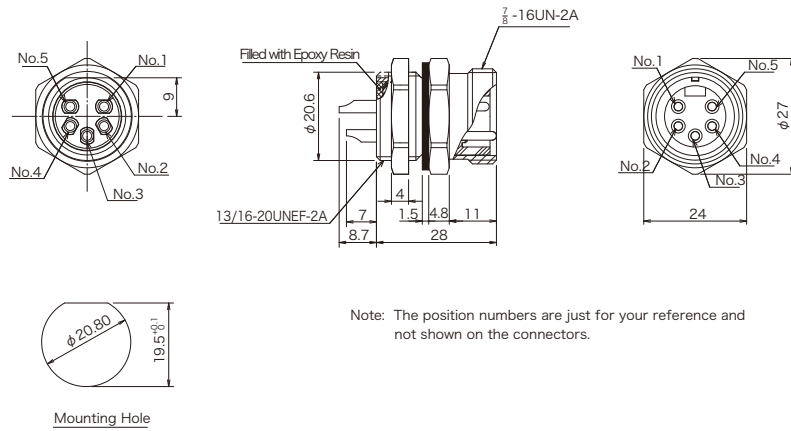
Item		P/N
A Set of Crimp Tool		357J-22483
Contents	Hand Tool	357J-12610
	Locator	357J-22484
	Inspection Gauge for AWG18	357J-22276-1
	Inspection Gauge for AWG14	357J-22276-2



▶ Receptacle With Pin Contacts

Soldering Type

P/N : CM03-R5P-S-CF(R1)



▶ Plug Receptacle With Socket Contacts

Soldering Type

P/N : CM03-PR5S-S-CF(R1)

