



Product Overview


Wire Mount Plug

Appearance	Model	Number of pins	Cover color	Applied wire		Reference
				Nominal cross section area(mm ²)	Cover diameter(mm)	
	CNE-P03-WT	3	Transparent	0.05 to 0.08 (AWG30 to 28)	Ø0.6 to 0.8	D-3 to 5
	CNE-P04-WT	4			Ø0.8 to 1.0	
	CNE-P03-YG	3	Yellow-Green		Ø1.0 to 1.2	
	CNE-P04-YG	4			Ø1.0 to 1.2	
	CNE-P03-VT	3	Violet		Ø0.8 to 1.0	
	CNE-P04-VT	4			Ø1.0 to 1.2	
	CNE-P03-RE	3	Red	Ø1.0 to 1.2		
	CNE-P04-RE	4		Ø1.2 to 1.6		
	CNE-P03-YW	3	Yellow	0.13 to 0.21 (AWG26 to 24)	Ø1.0 to 1.2	
	CNE-P04-YW	4			Ø1.2 to 1.6	
	CNE-P03-OG	3	Orange		Ø1.0 to 1.2	
	CNE-P04-OG	4			Ø1.2 to 1.6	
	CNE-P03-GN	3	Green		Ø1.2 to 1.6	
	CNE-P04-GN	4			Ø1.6 to 2.0	
	CNE-P03-BL	3	Blue	0.32 to 0.5 (AWG22 to 20)	Ø1.0 to 1.2	
	CNE-P04-BL	4			Ø1.2 to 1.6	
CNE-P03-GY	3	Gray	Ø1.2 to 1.6			
CNE-P04-GY	4		Ø1.6 to 2.0			

Wire Mount Socket

Appearance	Model	Number of pins	Cover color	Applied wire		Reference
				Nominal cross section area(mm ²)	Cover diameter(mm)	
	CNE-S03-WT	3	Transparent	0.05 to 0.08 (AWG30 to 28)	Ø0.6 to 0.8	D-3 to 5
	CNE-S04-WT	4			Ø0.8 to 1.0	
	CNE-S03-YG	3	Yellow-Green		Ø1.0 to 1.2	
	CNE-S04-YG	4			Ø1.0 to 1.2	
	CNE-S03-VT	3	Violet		Ø0.8 to 1.0	
	CNE-S04-VT	4			Ø1.0 to 1.2	
	CNE-S03-RE	3	Red	Ø1.0 to 1.2		
	CNE-S04-RE	4		Ø1.2 to 1.6		
	CNE-S03-YW	3	Yellow	0.13 to 0.21 (AWG26 to 24)	Ø1.0 to 1.2	
	CNE-S04-YW	4			Ø1.2 to 1.6	
	CNE-S03-OG	3	Orange		Ø1.0 to 1.2	
	CNE-S04-OG	4			Ø1.2 to 1.6	
	CNE-S03-GN	3	Green		Ø1.2 to 1.6	
	CNE-S04-GN	4			Ø1.6 to 2.0	
	CNE-S03-BL	3	Blue	0.32 to 0.5 (AWG22 to 20)	Ø1.0 to 1.2	
	CNE-S04-BL	4			Ø1.2 to 1.6	
CNE-S03-GY	3	Gray	Ø1.2 to 1.6			
CNE-S04-GY	4		Ø1.6 to 2.0			

Board Mount Socket

Appearance	Model	Lines	Number of pins	Connector	PCB	Reference
	CNE-B03	1	3	Wire mount plug	Fender plated-through hole ●Hole dia.: 1.0 mm ●Thickness: 1.0-2.2 mm	D-3 to 5
	CNE-B04		4			
	CNE-B203	2	3			
	CNE-B204		4			
	CNE-B403	4	3			
	CNE-B404		4			

Sensor Connector

■ Features

■ Wire mount plug/socket

- Compact and highly reliable of pressure welding connector
- Enables to connect wires as wire mount plug/socket
- Different 9 colors of cover by wire diameter
- Visible wiring status with translucent cover

■ Board mount socket

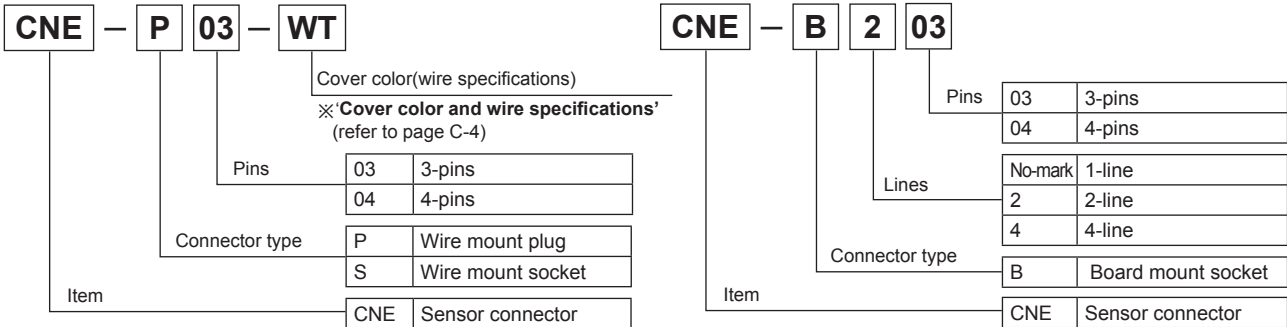
- Enables to insert 4 EA, 2 EA, or 1 EA wire mount plugs
- Contact placed in mold against electric shock and short-circuit
- Mountable on board closely

■ Commons

- Significantly reduces connection time and effort
- Wide products range for various wires
- Compact and high density installation with 2mm of contact pitch
- Compliance with e-CON
- Max. 3A of current capacity by a pin



■ Ordering Information



■ Specifications

Type	Wire mount plug	Wire mount socket	Board mount socket
Model	CNE-P □□	CNE-S □□	CNE-B □□
Application	Connector	Board mount socket/Wire mount socket	Wire mount plug
	Cable	AWG30 to 20 (Ø0.6 to Ø2.0)	
	PCB	—	
Rated voltage	Max. 250VAC/DC		
Rated current	Max. 3.0A		
Temperature	-20 to 85°C (applying 1A), -20 to 75°C (applying 2A), -20 to 60°C (applying 3A)		
Humidity	40 to 80%RH		
Terminal retention	Min.1.4kgf		
Pressure strength	UAWG30: Min. 0.5kgf UAWG24: Min. 0.8kgf UAWG20: Min. 1.0kgf		
Extraction	Min. 0.49N(50gf)/pin		
Insertion	Max. 1.96N (200gf)/pin		
Dielectric strength	1,000VAC for 1min. (between terminals)		
Insulated resistance	Min. 1,000MΩ (between terminals)		
Contact resistance	Max. 0.05Ω (short-current: 1mA, max. open voltage: 20mV)		
Material	Body : PCABS (UL94V-0), Terminal : C5210 (Gold 0.2μm), Case : PC (UL94-V0)		Body: PCABS (UL94-V0), Terminal: C5210 (Gold 0.2 μm)

I/O Terminal Blocks
AFS(Interface Terminal Block)
AFL/AFR(Interface Terminal Block)
ACS(Common Terminal Block)
AFE(Sensor Connector Terminal Block)
ABS(Relay Terminal Block)
ABL(Relay Terminal Block)
Power Relay

I/O Cables
MITSUBISHI
LSIS
Autonics
RS Automation
YOKOGAWA
FUJI
KDT
OMRON
TELEMECANIQUE
For SERVO
Open Type Cables
Cable Appearance

Remote I/O
ARD(DeviceNet Digital Standard Terminal Type)
ARD(DeviceNet Digital Sensor Connector Type)
ARD(DeviceNet Analog Standard Terminal Type)
ARM(Modbus Digital Sensor Connector Type)

Others
Sensor Connectors
Sockets
Sensor Distribution Boxes
Valve Plugs
Thumbwheel Switches

CNE Series

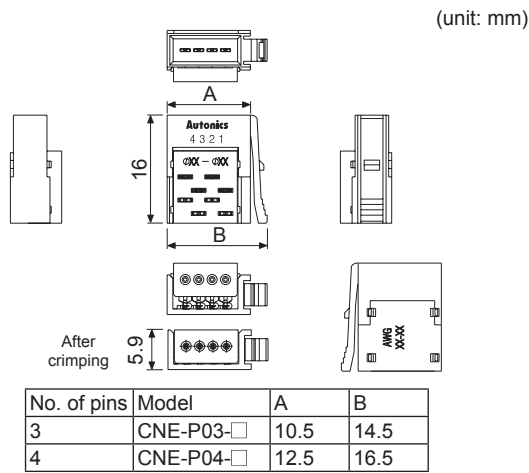
Cover Color And Wire Specifications

Cover color	3-pin	4-pin	Applied wire specifications	
			Nominal cross section area(mm ²)	Cover diameter(mm)
Transparent(WT)	CNE-□03-WT	CNE-□04-WT	0.05 to 0.08 (AWG 30 to 28)	∅0.6 to 0.8
Yellow-Green(YG)	CNE-□03-YG	CNE-□04-YG		∅0.8 to 1.0
Violet(VT)	CNE-□03-VT	CNE-□04-VT		∅1.0 to 1.2
Red(RE)	CNE-□03-RE	CNE-□04-RE	0.13 to 0.21 (AWG 26 to 24)	∅0.8 to 1.0
Yellow(YW)	CNE-□03-YW	CNE-□04-YW		∅1.0 to 1.2
Orange(OG)	CNE-□03-OG	CNE-□04-OG		∅1.2 to 1.6
Green(GN)	CNE-□03-GN	CNE-□04-GN	0.32 to 0.5 (AWG 22 to 20)	∅1.0 to 1.2
Blue(BL)	CNE-□03-BL	CNE-□04-BL		∅1.2 to 1.6
Gray(GY)	CNE-□03-GY	CNE-□04-GY		∅1.6 to 2.0

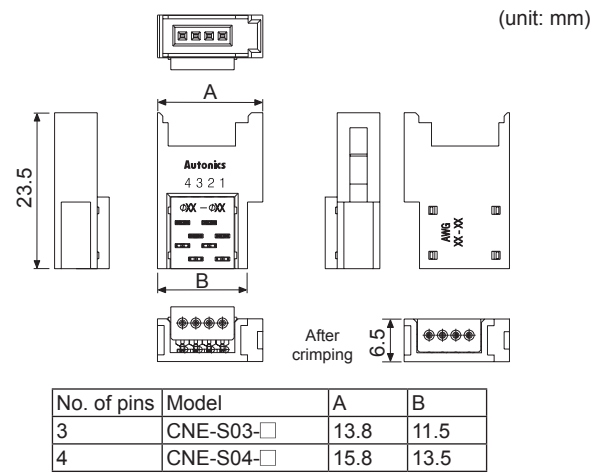
※□: P(Wire mount plug), S(Wire mount socket)

Dimensions

Wire mount plug



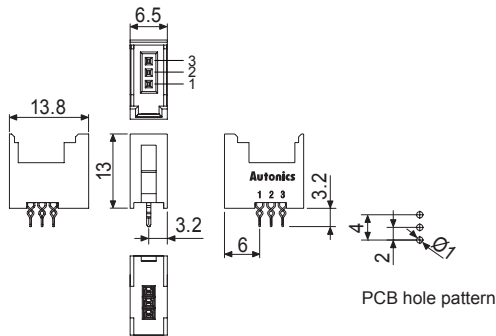
Wire mount socket



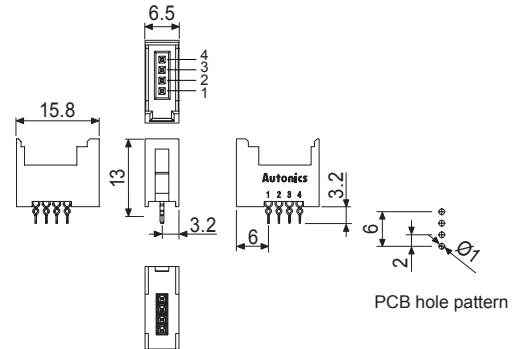
Board mount socket

(unit: mm)

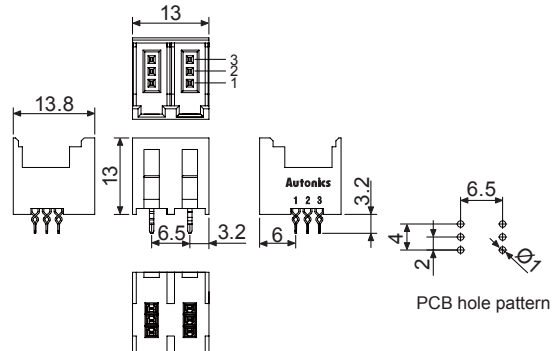
• CNE-B03(1-line×3-pin)



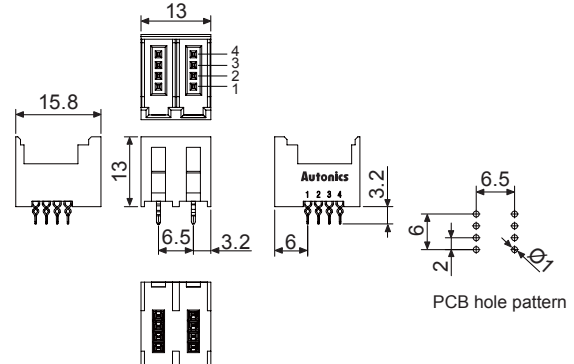
• CNE-B04(1-line×4-pin)



• CNE-B203(2-line×3-pin)

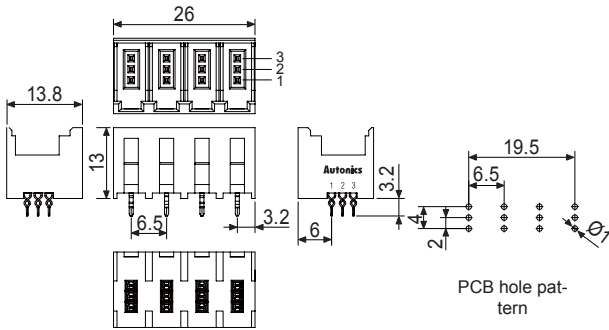


• CNE-B204(2-line×4-pin)

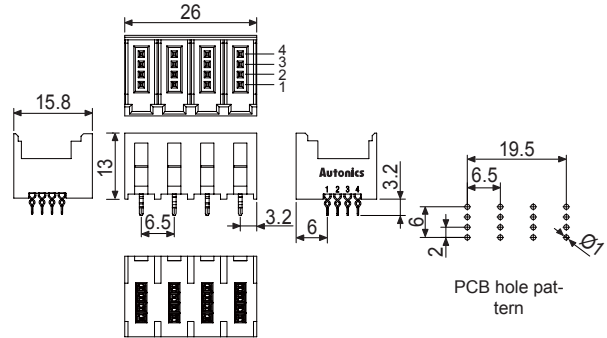


◎ Board mount socket

● CNE-B403(4-line×3-pin)



● CNE-B404(4-line×4-pin)



■ Wiring Sensor Connector

1) Selecting the connector

- Check the wire specifications (conductor section, cover diameter).
- Select the proper color of sensor connector(model) by referring to the below table.

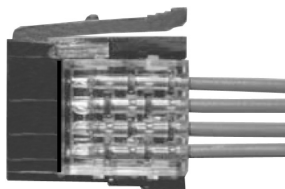
Cover color	Wire mount plug	Wire mount socket	Applied wire specifications	
			Nominal cross section area(mm ²)	Cover diameter(mm)
Transparent(WT)	CNE-P□-WT	CNE-S□-WT	0.05 to 0.08 (AWG 30 to 28)	Ø0.6 to 0.8
Yellow-Green(YG)	CNE-P□-YG	CNE-S□-YG		Ø0.8 to 1.0
Violet(VT)	CNE-P□-VT	CNE-S□-VT		Ø1.0 to 1.2
Red(RE)	CNE-P□-RE	CNE-S□-RE	0.13 to 0.21 (AWG 26 to 24)	Ø0.8 to 1.0
Yellow(YW)	CNE-P□-YW	CNE-S□-YW		Ø1.0 to 1.2
Orange(OG)	CNE-P□-OG	CNE-S□-OG	0.32 to 0.5 (AWG 22 to 20)	Ø1.2 to 1.6
Green(GN)	CNE-P□-GN	CNE-S□-GN		Ø1.0 to 1.2
Blue(BL)	CNE-P□-BL	CNE-S□-BL		Ø1.2 to 1.6
Gray(GY)	CNE-P□-GY	CNE-S□-GY		Ø1.6 to 2.0

- ※□: Number of pins (03: 3-pin, 04: 4-pin)
- ※The proper sensor connector may be different by conductor of wire.
- ※Cover diameter of applied wire at connector (at translucent part) and AWG number of body backside are marked.



2) Inserting the wires

- Check the pin numbers and insert the wires into the according holes.
- Check that the wires are fully inserted to the end of the cover.



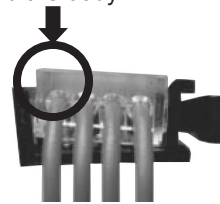
3) Crimping

- Insert the cover into the body with a jig (press fitting tool, etc).
- ※Apply pressure with the jig from the side, as shown in the figure below.

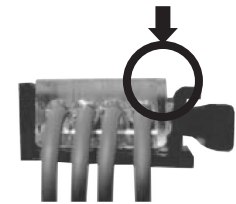


4) Check the cover

- Check to make sure that the cover is level with the body and that there is no space between the cover and the body.



Wrong(1)
Not enough cover insertion.



Wrong(2)
Not enough cover insertion.

※Press the part of arrows again.

I/O Terminal Blocks

AFS(Interface Terminal Block)
AFL/AFR(Interface Terminal Block)
ACS(Common Terminal Block)
AFE(Sensor Connector Terminal Block)
ABS(Relay Terminal Block)
ABL(Relay Terminal Block)
Power Relay

I/O Cables

mitsubishi
LSIS
Autonics
RS Automation
YOKOGAWA
FUJI
KDT
OMRON
TELEMECANIQUE
For SERVO
Open Type Cables
Cable Appearance

Remote I/O

ARD(DeviceNet Digital Standard Terminal Type)
ARD(DeviceNet Digital Sensor Connector Type)
ARD(DeviceNet Analog Standard Terminal Type)
ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets
Sensor Distribution Boxes
Valve Plugs
Thumbwheel Switches