

CLOSED END CONNECTORS



SPECIFICATION

- **MATERIAL** : Oxygen free copper tube.
(electro-tin-plated)
INSULATOR : NYLON
- **RATED VOLTAGE** : 300V
- **RATED CURRENT** : EC05-1 3A
EC1-1, CE-1, 7A
EC2-2, EC2-3, CE-2, 12A
EC3-1, CE-5, 17A
CE-8 23A
- **INSULATOR TEMPERATURE** : -40°C ~ +105°C
- **FLAME RETARDANCE** : UL94V2 (Available UL94V0 upon your request)

B

NOTE

Use for internal wiring of home appliances.

UL/CSA

Use with listed wire combinations.

STANDARDS

- Japanese Industrial Standards JIS C2807
- UL486C (File No. E44245)
- CSA C22.2 No.188(File No. LR-28418)

FOR SAFETY USE

Please observe the following points to prevent over heat and possible fire.

- For copper wire only.
- Use our recommended tools.
- Use within specified wire range.
- Use as soon as possible after opening the package.
- Keep unused parts in closed container.

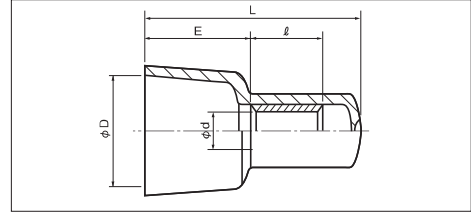
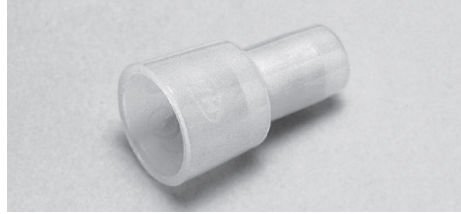
APPLICABLE WIRE

Wire range and performance ratings comply with JIS standards wire(IV, KIV, VSF) as per JIS C 2807:2003:-

1. Available for wire with max. strand dia. 1.0mm
2. When multiple wires with different dia. are crimped,
the smaller wire dia. must be more than 1/2 of the bigger wire, if the bigger wire is over 0.5mm dia.

CLOSED END CONNECTORS (CE TYPE)

JIS C 2807



RoHS 10
See page 2

B

PART NUMBER		DIMENSIONS mm					WIRE RANGE		TOOL No.		INS	COLOR	STD QTY/BOX
		φd	φD	L	l	E	mm ²	AWG	Hand	Pneumatic			
CE 1	●	2.4	6.5	18.0	6.2	8.8	0.5~1.75	22-16	NH 38	See page 149 For the die part number to use with NA10 or NA 3.	Nylon	Milky White	1,000 (100×10)
CE 2	●	3.0	8.0	21.0	7.3	9.6	1.0~3.0	16-14					
CE 5	●	3.9	10.5	28.0	7.2	10.8	2.5~6.0	12-10					
CE 8	●	4.8	12.0	24.5	8.2	11.9	4.0~9.0	8					500 (100×5)

NOTE 1) ● : JIS · UL · CSA

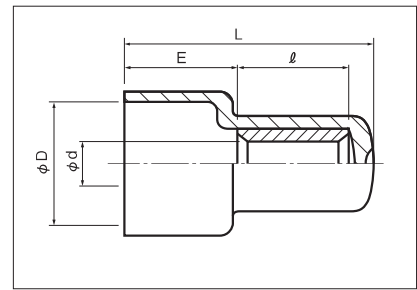
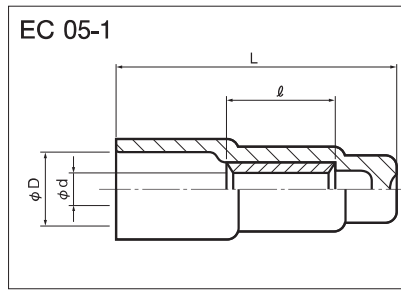
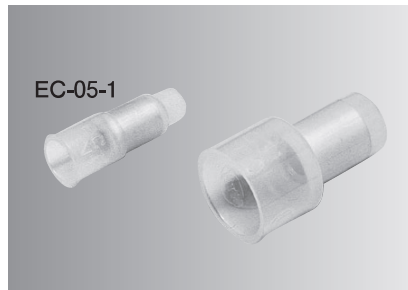
2) For UL/CSA, see tool selection. (Page 147)

WIRE COMBINATIONS CHART (UL/CSA)

■ See next page how to use this chart.

PART NUMBER	WIRE RANGE mm ²	WIRE A		WIRE B mm ² (AWG)							
		mm ² (AWG)	PCS	0.3 (22)	0.5 (20)	0.75 (18)	1.25 (16)	2.0 (14)	3.5 (12)	5.5 (10)	
CE 1	0.5~1.75	0.3 (22)	1	1~3	1~2	1	1	—	—	—	—
			2	0~2	1~2	1	—	—	—	—	—
			3	0~1	1	1	—	—	—	—	—
		0.5 (20)	1	1~3	1~2	1	1	—	—	—	—
			2	1~2	0~1	—	—	—	—	—	—
CE 2	1.0~3.0	0.3 (22)	1	3~7	2~4	1~2	1~2	1	—	—	
			2	2~6	1~3	1~2	1	1	—	—	
			3	1~5	1~3	1~2	1	1	—	—	
		0.5 (20)	1	2~6	1~4	1~2	1~2	1	—	—	
			2	1~5	0~3	1~2	1	1	—	—	
CE 5	2.5~6.0	0.3 (22)	1	1~5	1~3	1~2	1	1	—	—	
			2	1~4	1~2	0~1	1	—	—	—	
			3	1~2	1	0	—	—	—	—	
		0.75 (18)	1	1~4	1~2	1~2	1	—	—	—	
			2	1~4	1~2	0~1	1	—	—	—	
CE 8	4.0~9.0	0.5 (20)	1	1~4	1~2	1~2	1	—	—	—	
			2	1~2	1	—	—	—	—		
			3	1	—	—	—	—	—		
		0.75 (18)	1	7~9	5~9	3~6	2~3	2	1	1	
			2	6~8	4~8	3~6	2~3	1	1	—	
CE 5	2.5~6.0	0.5 (20)	1	5~7	4~7	3~5	2	1	1	—	
			2	5~7	3~7	2~4	1~2	1~2	1	—	
			3	3~5	2~6	2~3	1~2	1~2	1	—	
		0.75 (18)	1	7~8	4~8	3~5	2~3	1~2	1	1	
			2	4~6	1~5	2~4	1~2	1~2	1	—	
CE 8	4.0~9.0	1.25 (16)	1	1~5	1~3	1~3	1~2	1	1	—	
			2	5~8	3~4	2~4	1~2	1~2	1	—	
			3	1~6	1~3	1~2	0~1	1	—	—	
		2.0 (14)	1	1~6	1~4	1~2	1~2	1	—	—	
			2	1~6	1~4	1~2	1	—	—	—	
CE 8	4.0~9.0	0.5 (20)	1	—	7~12	5~8	3~4	2~3	1~2	1	
			2	—	6~11	4~7	2~4	2~3	1~2	1	
			3	—	5~10	4~7	2~4	2	1	1	
			4	—	4~9	3~6	1~3	1~2	1	1	
			5	—	3~8	2~5	1~3	1~2	1	1	
			6	—	2~7	2~4	1~2	1	1	1	
		0.75 (18)	1	—	7~11	5~8	3~4	2~3	1~2	1	
			2	—	5~10	4~7	2~4	2	1~2	1	
			3	—	4~9	3~6	2~3	1~2	1	1	
			4	—	2~8	2~5	1~2	1~2	1	1	
			5	—	1~6	1~4	1~2	1	1	—	
			6	—	7~11	4~8	3~4	2	1	1	
		1.25 (16)	1	—	5~10	2~6	2~3	1~2	1	—	
			2	—	1~7	1~4	1~2	1~2	1	—	
			3	—	1~6	1~3	0~1	1~2	1	—	
2.0 (14)	1	—	7~10	3~7	2~4	1~2	1	1			
	2	—	1~8	1~4	1~2	0~1	1	—			
	3	—	1~5	1~2	1~2	0	—	—			
3.5 (12)	1	—	1~8	1~5	1~2	1	1	1			
	2	—	1~2	1~2	1	1	0	—			
5.5 (10)	1	—	1~5	1~4	1~3	1	1	—			

CLOSED END CONNECTORS (EC TYPE)



B

RoHS 10
See page 2

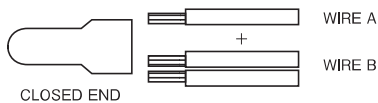
PART NUMBER	DIMENSIONS mm					WIRE RANGE		TOOL No.		INS	COLOR	STD QTY/BOX
	φd	φD	L	ℓ	E	mm ²	AWG	Hand	Pneumatic TOOL BODY No. / DIES No.			
EC 05-1	1.6	3.5	13.0	5.0	5.1	0.13~0.9	26-18	NH 5	NA 3 / N3 5	Nylon	Milky White	2,000 (1,000×2)
EC 1-1	2.2	6.2	15.2	7.8	5.7	0.5~1.65	22-16	NH 38	See page 149 For the die part number to use with NA10 or NA 3.			1,000 (100×10)
EC 2-2 ○		7.9	16.5	8.0	7.0	1.0~2.63	16-14					
EC 2-3 ○		3.0	8.0	23.0	7.3	9.6	1.0~3.0					
EC 3-1 ○	3.5	9.4	19.0	8.6	8.1	2.63~6.64	12-10			500 (100×5)		

NOTE 1) ○ : For UL/CSA, see tool selection. (Page 147)

WIRE COMBINATIONS CHART (UL/CSA)

PART NUMBER	WIRE COMBINATION mm ²	WIRE A		WIRE B mm ² (AWG)				
		mm ² (AWG)	PCS	0.5 (20)	0.75 (18)	1.25 (16)	2.0 (14)	3.5 (12)
EC 2-2	1.0~2.63	0.5 (20)	1	1~3	1~2	1	—	—
		0.75 (18)		1~3	1	1	—	—
		1.25 (16)		1~2	1	1	—	—
EC 2-3	1.0~3.0	0.5 (20)	1	0~2	1	1	—	—
		0.5 (20)		1~3	1~3	1~2	1	—
		0.75 (18)		1~3	1~2	1~2	1	—
		1.25 (16)		1~3	1~2	1	1	—
		2.0 (14)	1~2	1	—	—	—	
EC 3-1	2.63~6.64	0.5 (20)	1	0~2	1~2	1	—	—
		0.5 (20)		1~3	1~3	2~3	2	1
		0.75 (18)		4~5	3~4	2~3	1~2	1
		1.25 (16)		3~4	2~4	1~2	1	1
		2.0 (14)		2~4	1~3	1~2	1	1
		3.5 (12)	1~3	1~2	1	—	—	
		0.5 (20)	2	4	3~4	2	1	1
0.75 (18)	3~4	2~3		1~2	1	1		
		1.25 (16)		1~3	1~2	0~1	1	—

■ How to use this chart.

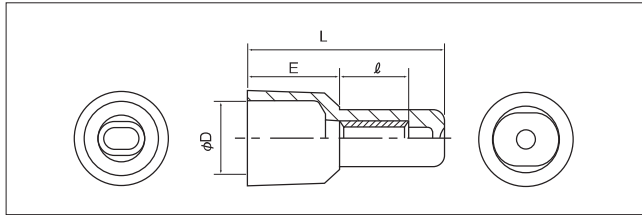


1. Choose wire size and number of wires from WIRE A.
2. Select wire size from the upper part of WIRE B.

3. Find the cross section of the chart from the wire sizes of 1. & 2. to find the number of wires in WIRE B.
4. Add the numbers of wire of WIRE A & WIRE B.
This number is the total number of wire combinations applicable for wire size A & wire size B

HIGH TEMP CLOSED END CONNECTORS

B



SPECIFICATION

When a fire breaks out, the circuit for the fire alarm must withstand the enormous heat to activate the alarm. These closed end connectors surpass the temperature rise test to 380 °C in 15 minutes.

FEATURE

- RATED CURRENT SQ CE-2HP/5HP : 5A
- RATED VOLTAGE 300V
- INSTALLATION TEMP : 0 ~ 40°C
- INSULATOR TEMPERATURE : -40 ~ 75°C

RoHS 10

See page 2

PART NUMBER	DIMENSIONS mm				TOOL No.	MATERIAL OF INSULATOR	COLOR	STD QTY/BOX
	φ D	L	l	E				
SQ CE - 2HP	9.6	20.0	7.0	9.5	NH 40	CROSS LINKED POLYETHYLENE	RED TRANSLUCENT	1,000(100×10)
SQ CE - 5HP	12.3	22.0	8.1	10.0				500(100×5)

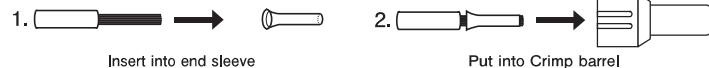
EXAMPLE OF WIRE COMBINATION

PART NUMBER	SOLID + SOLID WIRE				SOLID + STRANDED WIRE (USE END SLEEVE FOR STRANDED WIRE)	TOOL No.	
	φ 0.9mm	φ 1.0mm	φ 1.2mm	φ 1.6mm		DIE ID	
SQ CE - 2HP	2pcs	—	2pcs	—	φ 0.9mm×1pc+0.5mm ² ×1pc φ 0.9mm×1pc+0.75mm ² ×1pc φ 1.0mm×1pc+0.5mm ² ×1pc φ 1.0mm×1pc+0.75mm ² ×1pc	2HP	NH 40
	φ 0.9mm×1pc+ φ 1.2mm×1pc						
SQ CE - 5HP	3~4pcs	—	3~4pcs	2pcs	φ 0.9mm×1pc+1.25mm ² ×1pc φ 1.0mm×1pc+1.25mm ² ×1pc φ 1.2mm×1pc+0.5mm ² ×1~2pcs φ 1.2mm×1pc+0.75mm ² ×1~2pcs φ 1.2mm×1pc+1.25mm ² ×1pc φ 1.2mm×2pcs+0.5mm ² ×1pc	5HP	NH 40
	φ 0.9mm×1pc+ φ 1.2mm×2pcs φ 0.9mm×2pcs+ φ 1.2mm×1pc						

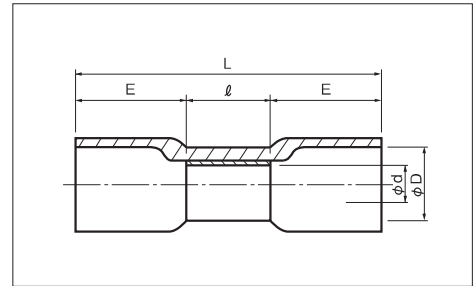
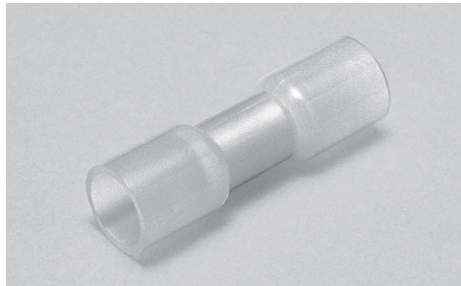
Use applicable end sleeve from the chart

STRANDED WIRE SIZE	0.5mm ²	0.75mm ²	1.25mm ²
PART No. OF END SLEEVE	E 0.5	E 0.75	E 1.25
DIMENSIONS (mm)	φ d × φ D × L 1.0 × 1.3 × 10	φ d × φ D × L 1.2 × 1.5 × 10	φ d × φ D × L 1.6 × 1.8 × 10

NOTE : Stranded wires must be inserted into the end sleeves before crimping.



INTERMEDIATE CONNECTORS (MP TYPE)



RoHS 10
See page 2

B

PART NUMBER	DIMENSIONS mm					WIRE RANGE		TOOL No.		INS	COLOR	STD QTY/BOX
	φd	φD	L	l	E	mm ²	AWG	HAND TOOL No.				
								TOOL BODY No.	DIES No.			
MP 2-4	2.8	6.0	25.0	7.0	9.0	1.0~3.0	16-14	NH 38 NA 3 N3 14		Nylon	Translucent	1,000

WIRE COMBINATIONS CHART

■ See page 67 how to use this chart.

* There is a same combination.

PART NUMBER	WIRE COMBINATION mm ²	WIRE A		WIRE B mm ² (AWG)			
		mm ² (AWG)	PCS	0.5 (20)	0.75 (18)	1.25 (16)	2.0 (14)
MP 2-4	1.0~3.0	0.5 (20)	1	1~3	1~2	1	1
		0.75 (18)		1~3	1~2	1	1
		1.25 (16)		1~2	1	1	—
		2.0 (14)		1	1	—	—
		0.5 (20)	2	*	1	—	—