

S P E C I F I C A T I O N

Chloroprene rubber sheathed cable for conductor
WNCT

M I T S U B O S H I C O . , L T D .

No.

RN-230000

S P E C I F I C A T I O N

MITSUBOSHI CO., LTD.

Name of Manufacture

Chloroprene rubber sheathed cable for conductor

Applicable Standards

JIS C 3005, JIS C 3102, JIS C 3152, JIS C 3404

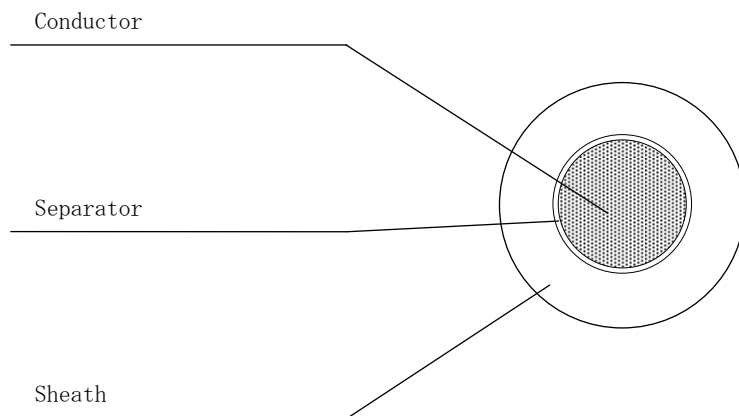
Electrical appliance and material safety law, Technical standards for electrical installations

1. Scope

This Specification covers quality level of WNCT mainly to be used on the secondary side for conductor of arc welders.

2. Construction and materials

(Construction)



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|-----|-----------|---|
| 2.1 | Conductor | A stranded wire is composed of the annealed copper wire specified in JIS C 3102 or the tinned annealed copper wire specified in JIS C 3152. |
| 2.2 | Separator | A suitable separator is applied on the conductor. |
| 2.3 | Sheath | Chloroprene rubber compound
The average thickness of sheath is not less than 90% of the value in Attached Tables.
The minimum thickness of sheath is not less than 80% of the value in Attached Tables. |

3. Characteristics

Item		Characteristics	Test method
Appearance		The surface be smooth and there is not a flaw in case of use.	JIS C 3005 4.1
Construction		It depends on the Attached Table with structure and size.	JIS C 3005 4.3
Conductor resistance		Not more than the value in Attached Table.	JIS C 3005 4.4
Dielectric withstand voltage (in water)		Capable of withstanding 1000V for 1min.	JIS C 3005 4.6 a)
※1) Tensile properties	Sheath	Tensile strength	Not less than 13Mpa JIS C 3005 4.16
		Elongation	
※1) Thermal aging	Sheath	Tensile strength	Not less than 65% of the value before heating JIS C 3005 4.17
		Elongation	
※1) Oil resistance	Sheath	Tensile strength	※2) Not less than 60% of the value before oil-Immersion JIS C 3005 4.18
		Elongation	
※1) Flame retardance		To disappear naturally within 60 seconds	JIS C 3005 4.26.2 a)
※1) Impact		No damage nor crack to develop, number of broken component wires in each core not to exceed 30%	JIS C 3005 4.28

※1) The quality characteristic to enforce inspection regularly with an in-house standard.

※2) For the test piece less than 1mm in thickness, not less than 50%.

4. Marking on cable

The following information is continuously marked on cable.

- ① The symbol of the cable
- ② Nominal sectional area
- ③ Manufacture's name or abbreviation

Example: WNCT 2 2mm²

★ ★ MITSUBOSHI WNCT 22mm²

5. Length and packaging

According to the Attached Table.

6. Marking on package

The following information is marked on package.

- ① The symbol of the cable and nominal sectional area
- ② Length
- ③ Year of manufacture or lot No.
- ④ Manufacture's name

Attached Table : Construction, Size, Weight, and electric characteristic

Size (mm ²)	Conductors		Sheath	Overall diameter (approx.) (mm)	Approx. mass (kg/km)	※) Conductor resistance 20℃ (Ω/km)	Standard Unit length And packaging
	Composition	Outside diameter (approx.) (mm)	Thickness (approx.) (mm)				
14	88/0.45	4.9	2.3	9.6	210	1.32 1.39	200m Bundle
22	7/20/0.45	7.0	2.3	11.5	315	0.844 0.892	
30	7/27/0.45	8.1	2.5	13.0	415	0.625 0.661	
38	7/34/0.45	9.1	2.6	14.1	505	0.496 0.525	
50	19/16/0.45	10.4	2.7	15.6	620	0.394 0.411	200m Drum
60	19/20/0.45	11.6	2.8	17.0	755	0.311 0.329	
80	19/27/0.45	13.5	3.0	19.2	990	0.230 0.243	
100	19/34/0.45	15.2	3.2	21.3	1,235	0.183 0.193	
125	19/42/0.45	16.8	3.3	23.6	1,505	0.148 0.156	
150	27/34/0.45	18.7	3.5	25.4	1,710	0.129 0.136	
200	37/34/0.45	21.2	3.8	28.4	2,305	0.0939 0.0993	
250	37/42/0.45	23.6	4.0	31.4	2,830	0.0760 0.0803	
325	37/55/0.45	27.0	4.3	35.7	3,690	0.0581 0.0614	

※) Upper section: (A) annealed copper wire
 Lower section: (TA) tinned annealed copper wire