

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

Natural rubber insulated chloroprene rubber sheathed cable for holder  
WRNCT

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

No.

RN-250000

## SPECIFICATION

MITSUBOSHI CO., LTD.

Name of Manufacture

Natural rubber insulated chloroprene rubber sheathed cable for holder

Applicable Standards

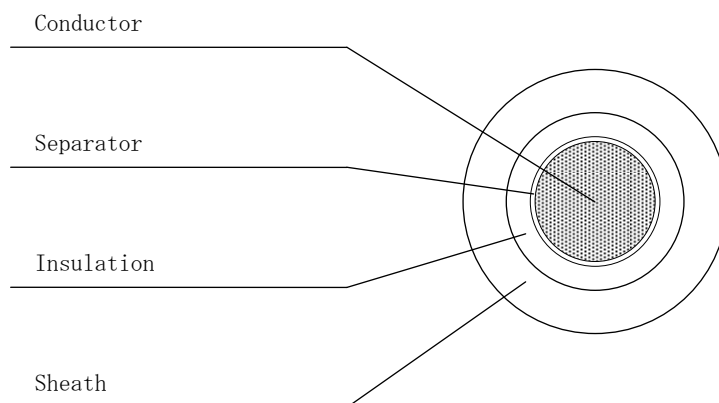
JIS C 3404, JIS C 3102, JIS C 3152, JIS C 3005, Electrical appliance and material safety law

## 1. Scope

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

## 2. Construction and materials

(Construction)



- |     |            |  |
|-----|------------|--|
| 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 | Insulation | Natural rubber compound<br>The average thickness of the insulation is not less than 90% of the value in Attached Tables. The minimum thickness of the insulation is not less than 80% of the value in Attached Tables. |
| 2.4 | Sheath     | Chloroprene rubber compound<br>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 1500V for 1min.	JIS C 3005 4.6 a)
*Tensile properties	Insulation	Tensile strength	JIS C 3005 4.16
		Elongation	
	Sheath	Tensile strength	
		Elongation	
* <sup>1)</sup> Thermal aging	Insulation	Tensile strength	JIS C 3005 4.17
		Elongation	
	Sheath	Tensile strength	
		Elongation	
* <sup>1)</sup> Oil resistance	Sheath	Tensile strength	JIS C 3005 4.18
		Elongation	
* <sup>1)</sup> Flame retardance		To disappear naturally within 60 seconds	JIS C 3005 4.26.2 a)

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

※<sup>2)</sup> 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: WRNCT 22mm<sup>2</sup>

★ MITSUBOSHI WRNCT 22mm<sup>2</sup>

### 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 <sup>2</sup> )	Conductors		Insulation		Sheath	Overall diameter (approx.) (mm)	Approx. mass (kg/km)	※) Conductor resistance 20°C (Ω/km)	Standard Unit length And packaging
	Composition	Outside diameter (approx.) (mm)	Thickness (approx.) (mm)	Outside diameter (approx.) (mm)	Thickness (approx.) (mm)				
14	7/99/0.16	5.3	0.8	7.0	1.6	10.2	230	1.35 1.44	200m Bundle
22	7/7/22/0.16	6.6	0.8	8.4	1.6	11.6	310	0.896 0.944	200m Drum
30	7/7/30/0.16	7.7	0.8	9.5	1.7	12.9	405	0.657 0.692	
38	7/7/38/0.16	8.7	0.8	10.5	1.8	14.1	495	0.519 0.546	
50	7/7/50/0.16	10.0	0.8	11.8	2.0	15.8	635	0.394 0.415	
60	7/7/60/0.16	10.9	0.8	12.7	2.0	16.7	740	0.328 0.346	
80	12/7/50/0.16	13.1	1.0	15.3	2.3	19.9	1,050	0.230 0.242	
100	12/7/60/0.16	14.3	1.0	16.5	2.4	21.3	1,235	0.192 0.202	

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