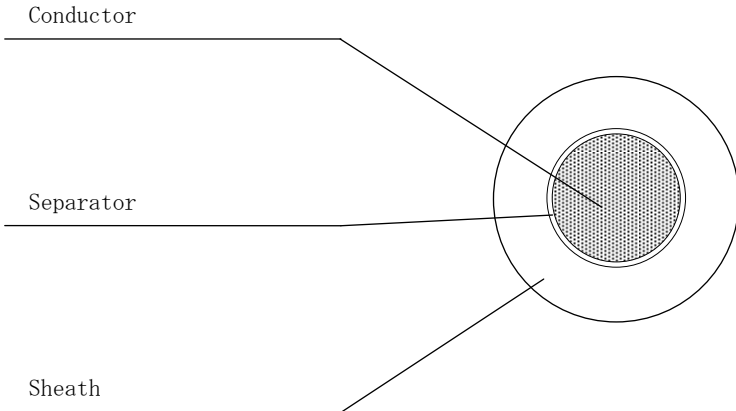


# S P E C I F I C A T I O N

Natural rubber sheathed cable for conductor  
WCT

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

No. RN-220000	S P E C I F I C A T I O N	MITSUBOSHI CO., LTD.
Name of Manufacture Natural 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		
<p>1. Scope</p> <p>This Specification covers quality level of <u>WCT</u> mainly to be used on the secondary side for conductor of arc welders.</p> <p>2. Construction and materials</p> <p>(Construction)</p> <div style="text-align: center;">  </div> <p>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.</p> <p>2.2 Separator      A suitable separator is applied on the conductor.</p> <p>2.3 Sheath          Natural 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.</p>		

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 14Mpa JIS C 3005 4.16
		Elongation	
※1) Thermal aging	Sheath	Tensile strength	Not less than 50% of the value before heating JIS C 3005 4.17
		Elongation	
※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.

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: WCT 22mm<sup>2</sup>

☆☆ MITSUBOSHI WCT 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		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	200	1.32 1.39	200m Bundle
22	7/20/0.45	7.0	2.3	11.5	305	0.844 0.892	
30	7/27/0.45	8.1	2.5	13.0	400	0.625 0.661	
38	7/34/0.45	9.1	2.6	14.1	490	0.496 0.525	
50	19/16/0.45	10.4	2.7	15.6	600	0.394 0.411	200m Drum
60	19/20/0.45	11.6	2.8	17.0	735	0.311 0.329	
80	19/27/0.45	13.5	3.0	19.2	965	0.230 0.243	
100	19/34/0.45	15.2	3.2	21.3	1,200	0.183 0.193	
125	19/42/0.45	16.8	3.3	23.6	1,490	0.148 0.156	
150	27/34/0.45	18.7	3.5	25.4	1,690	0.129 0.136	
200	37/34/0.45	21.2	3.8	28.4	2,285	0.0939 0.0993	
250	37/42/0.45	23.6	4.0	31.4	2,810	0.0760 0.0803	
325	37/55/0.45	27.0	4.3	35.7	3,660	0.0581 0.0614	

※) Upper section: (A) annealed copper wire

Lower section: (TA) tinned annealed copper wire