

Electrical Properties



MSS Products Ltd.

Electrical Properties at 20°C

	Designations		Volume Resistivity	Mass Resistivity	Conductivity	
Material			$\Omega \times \text{mm}^2 / \text{m}$	$\Omega \times \text{g} / \text{m}^2$	MS/m	% IACS ^b
Symbol	Number	Material condition	max.	max.	min.	min.
			0,017 07	0,151	58,6	101,0
Cu-OFE	CW009A	annealed	0,017 24	0,153 3	58,0	100,0
Cu-PHCE	CW022A	other than annealed		to be agreed between the purchaser and the supplier		
Cu-ETP	CW004A	D	0,017 86	0,158 8	56,0	96,6
Cu-FRHC	CW005A	H035 R200	0,017 24	0,153 3	58,0	100,0
Cu-OF	CW008A	H065 R250				
CuAg0,04	CW011A	H065 R230				
CuAg0,07	CW012A	H085 R300	0,017 54	0,155 9	57,0	98,3
CuAg0,10	CW013A	H085 R280				
CuAg0,04(0F)	CW017A	H075 R260				
CuAg0,07(0F)	CW018A	H100 R350	0,017 86	0,158 8	56,0	96,6
CuAg0,10(0F)	CW019A					
Cu-PHC	CW020A					
		D	0,01818	0,161	55,0	94,8
CuAg0,04P	CW014A	H035 R200	0,017 54	0,155 9	57,0	98,3
CuAg0,07P	CW015A	H065 R250				
CuAg0,10P	CW016A	H065 R230				
Cu-HCP	CW021A	H085 R300	0,017 86	0,158 8	56,0	96,6
		H085 R280	0,018 18	0,161	55,0	94,8
		H075 R260				
		H100 R350				

NOTE 1: The % IACS values are calculated as percentages of the standard value for annealed high conductivity copper as laid down by the International Electrotechnical Commission. Copper having a volume resistivity $0,017\ 24\ \mu\Omega \times \text{m}$ at $20\ ^\circ\text{C}$, is defined as corresponding to a conductivity of 100 %.

NOTE 2: 1 MS/m is equivalent to $1\ \text{m}/(\Omega \times \text{mm}^2)$.

a : Calculated with a density of copper $8,89\ \text{g}/\text{cm}^3$.

b : IACS: International Annealed Copper Standard.