

Conductivity and Resistivity Values for Nickel & Alloys

Material	Conductivity		Resistivity	Reference	Notes
	(% IACS)	(Siemens/m)	(Ohm-m)	(See Endnotes)	
Nickel Alloys					
Nickel 200	18.15		9.500E-08	MHASM2	conductivity converted from resistivity
Nickel 201	20.28		8.500E-08	MHASM2	conductivity converted from resistivity
Nickel 205	18.15		9.500E-08	MHASM2	conductivity converted from resistivity
Nickel 211	10.20		1.690E-07	MHASM2	conductivity converted from resistivity
Nickel 212	15.82		1.090E-07	MHASM2	conductivity converted from resistivity
Nickel 222	19.59		8.800E-08	MHASM2	conductivity converted from resistivity
Alloy 230	1.38		1.250E-06	MHASM2	conductivity converted from resistivity
Nickel 270	22.99		7.500E-08	MHASM2	conductivity converted from resistivity
Alloy C-276	1.33		1.300E-06	MHASM2	conductivity converted from resistivity
Duranickel 301 (precipitation hardened)	4.07		4.240E-07	MHASM2	conductivity converted from resistivity
Alloy 400	3.15		5.470E-07	MHASM2	conductivity converted from resistivity
Alloy 401	3.53		4.890E-07	MHASM2	conductivity converted from resistivity
Alloy R-405	3.38		5.100E-07	MHASM2	conductivity converted from resistivity
Alloy 450	4.18		4.120E-07	MHASM2	conductivity converted from resistivity
Alloy K-500 (precipitation hardened)	2.80		6.150E-07	MHASM2	conductivity converted from resistivity
Alloy 556	1.81		9.520E-07	MHASM2	conductivity converted from resistivity
Alloy 600	1.67		1.030E-06	MHASM2	conductivity converted from resistivity
Alloy 601	1.45		1.190E-06	MHASM2	conductivity converted from resistivity
Alloy 617 (solution annealed)	1.41		1.220E-06	MHASM2	conductivity converted from resistivity
Alloy 625	1.34		1.290E-06	MHASM2	conductivity converted from resistivity
Alloy 690	1.50		1.148E-06	MHASM2	conductivity converted from resistivity

Alloy 718 (precipitation hardened)	1.38		1.250E-06	MHASM2	conductivity converted from resistivity
Alloy X750	1.41		1.220E-06	MHASM2	conductivity converted from resistivity
Alloy 751	1.41		1.220E-06	MHASM2	conductivity converted from resistivity
Alloy HX (solution annealed)	1.49		1.160E-06	MHASM2	conductivity converted from resistivity
Alloy S (solution annealed)	1.35		1.280E-06	MHASM2	conductivity converted from resistivity
Alloy X	1.46		1.180E-06	MHASM2	conductivity converted from resistivity
Alloy 800	1.74		9.890E-07	MHASM2	conductivity converted from resistivity
Alloy 825	1.53		1.130E-06	MHASM2	conductivity converted from resistivity
Alloy 925	1.48		1.166E-06	MHASM2	conductivity converted from resistivity
20Cb3	1.59		1.082E-06	MHASM2	conductivity converted from resistivity
20Mo-4	1.63		1.056E-06	MHASM2	conductivity converted from resistivity
20Mo-6	1.59		1.082E-06	MHASM2	conductivity converted from resistivity
Alloy 902 (precipitation hardened)	1.69		1.020E-06	MHASM2	conductivity converted from resistivity
Alloy 903 (precipitation hardened)	2.83		6.100E-07	MHASM2	conductivity converted from resistivity
Alloy 907 (precipitation hardened)	2.47		6.970E-07	MHASM2	conductivity converted from resistivity
Alloy 909 (precipitation hardened)	2.37		7.280E-07	MHASM2	conductivity converted from resistivity
18% Nickel Sil	6.00	3.480E+06	2.874E-07	CSNDT	

CSNDT=CSNDT compiled by Eddy Current Technology Incorporated
MHASM2=ASM Metals Handbook--Volume 2, Tenth Edition