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Alloy 304L Stainless Steel

ASTM:	UNS: S30403
Ω/cir. mil. ft.: 433	Weight/Density: .289 lbs/in² (7.9 g/cm³)
Chemical Composition %: Ni 8-12%, C .03% max, Cr 18-20%, Si 1%, Mn 2%, P .045%, S .03%	
Coeff. of Lin. Expansion, X 10⁻⁶: 17.8 (20-500°C) Specific Heat: .120 cal./gm @ 20°C	
Conductivity: 16 w/mK	Specific Gravity: 7.9
Temp. Coeff. of Resistance: .00085	Elongation: 20-40%
Melting Point: ~1,450°C (~2,650°F)	Yield Point: 20,000-40,000 PSI
Max Operating Temp: ~925°C (~1,700°F)	Soft Tensile: 80,000-110,000 PSI

Diameter			Resistance @ 68° F/20° C Ω /ft	Sq. in./ Ω 68°F	Weight Lb./1000 ft	Ω /lb.	Ft/Lb.	Cross sectional area (in ²)
B&S	Inches	Mm						
13	0.072	1.83	0.084	32.50	14.2	5.90	70.60	0.00407
14	0.064	1.63	0.106	22.82	11.2	9.43	89.24	0.00322
15	0.057	1.45	0.133	16.12	8.91	15.0	112.2	0.00256
16	0.051	1.29	0.166	11.55	7.06	23.6	141.6	0.00203
17	0.045	1.15	0.214	7.934	5.60	38.2	178.5	0.00161
18	0.04	1.02	0.271	5.572	4.38	61.7	228.1	0.00126
19	0.036	0.912	0.334	4.062	3.55	94.1	281.7	0.00102
20	0.032	0.812	0.423	2.853	2.80	151.1	357.4	0.000804
21	0.0285	0.723	0.533	2.015	2.22	240.1	450.4	0.000638
22	0.0253	0.644	0.676	1.410	1.76	383.4	566.8	0.000507
23	0.0226	0.573	0.848	1.005	1.40	607.5	716.6	0.000401
24	0.0201	0.51	1.072	0.707	1.09	980.8	915.1	0.000314
25	0.0179	0.455	1.351	0.499	0.884	1,529	1,131	0.000254
26	0.0159	0.405	1.713	0.350	0.693	2,473	1,444	0.000199
27	0.0142	0.361	2.147	0.249	0.550	3,905	1,819	0.000158
28	0.0126	0.321	2.727	0.174	0.435	6,270	2,299	0.000125
29	0.0113	0.286	3.391	0.126	0.348	9,744	2,874	0.000100
30	0.01	0.255	4.330	0.087	0.273	15,850	3,661	0.0000785
31	0.0089	0.227	5.466	0.061	0.218	25,093	4,590	0.0000626
32	0.008	0.202	6.766	0.045	0.173	39,196	5,793	0.0000496
33	0.0071	0.18	8.590	0.031	0.137	62,646	7,293	0.0000394
34	0.0063	0.16	10.91	0.022	0.109	100,478	9,210	0.0000312
35	0.0056	0.143	13.81	0.015	0.0860	160,633	11,634	0.0000247
36	0.005	0.127	17.32	0.0109	0.0682	253,929	14,661	0.0000196
37	0.0045	0.113	21.38	0.0079	0.0529	404,241	18,905	0.0000152
38	0.004	0.101	27.06	0.0056	0.0438	617,189	22,806	0.0000126
39	0.0035	0.09	35.35	0.0037	0.0341	1,037,504	29,352	0.00000979
40	0.0031	0.08	45.06	0.0026	0.0271	1,662,064	36,888	0.00000779
41	0.00275	0.07	57.26	0.0018	0.0214	2,670,930	46,649	0.00000616
42	0.0025	0.063	69.28	0.00136	0.0169	4,087,894	59,005	0.00000487
43	0.00225	0.057	85.53	0.00099	0.0132	6,467,851	75,620	0.00000380
44	0.0020	0.051	108.25	0.00070	0.0109	9,906,472	91,515	0.00000314
45	0.00175	0.044	141.39	0.00047	0.0085	16,719,615	118,254	0.00000243
46	0.0015	0.038	192.44	0.00029	0.0070	27,512,501	142,963	0.00000201
47	0.0014	0.036	220.92	0.00024	0.0054	41,222,266	186,595	0.00000154
48	0.0013	0.033	256.21	0.00019	0.0042	60,846,637	237,485	0.00000121