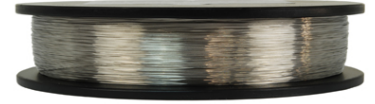


SPECIFICATIONS

Shape:	Round
Heat treatment:	Annealed (soft)
Max. operating temp:	1400°C (2550°F)
Nominal composition:	22% Cr 5.8% Al Fe balance
Density:	7.1 g/cubic cm (0.256 lbs/cubic in.)
Thermal conductivity at 50°C (122°F):	11 W/m K (76 Btu in/ft ² h°F)
Tensile strength:	680 N/mm ² (98600 psi)
Yield point:	545 N/mm ² (79000 psi)
Hardness:	240 Hv
Elongation at rupture:	20%
Tensile strength at 900°C (1650°F):	34 N/mm ² 4900 psi
Emissivity, full oxidized condition:	0.7



TEMPERATURE FACTOR OF RESISTIVITY

Temperature

68°F (20°C)	1.00
212°F (100°C)	1.00
392°F (200°C)	1.01
572°F (300°C)	1.01
752°F (400°C)	1.02
932°F (500°C)	1.03
1112°F (600°C)	1.04
1292°F (700°C)	1.04
1472°F (800°C)	1.05
1652°F (900°C)	1.05
1832°F (1000°C)	1.06
2012°F (1100°C)	1.06
2192°F (1200°C)	1.06
2372°F (1300°C)	1.06

ELECTRICAL RESISTANCE AT OPERATING TEMPERATURE

$$R = \frac{R_t}{F} \text{ (ohms)}$$

F = Temperature factor of resistivity

R = Element resistance at 20°C / 68°F (Ohms)

R_t = Element resistance at operating temperature (Ohms)

LINEAR THERMAL EXPANSION COEFFICIENT

Temperature

20-250°C (68-480°F)	11
20-500°C (68-930°F)	12
20-750°C (68-1380°F)	14
20-1000°C (68-1840°F)	15

CREEP STRENGTH

Temperature

800°C (1470°F)	1.2 N/mm ² (170 psi)
1000°C (1830°F)	0.5 N/mm ² (70 psi)

DIMENSIONS & RESISTANCE

Gauge	Feet/lb.	Ohms/ft @ Room Temp	Diameter (mm)	Diameter (in.)
16	159	0.324	1.29032	0.0508
18	253	0.515	1.02362	0.0403
20	401	0.817	0.817	0.032
22	641	1.31	0.64262	0.0253
23	805	1.69	0.573	0.02257
24	1018	2.07	0.51054	0.0201
25	1283	2.72	0.455	0.0179
26	1626	3.31	0.40386	0.0159
27	2040	4.15	0.36068	0.0142
28	2609	5.27	0.32004	0.0126
29	3226	6.55	0.28702	0.0113
30	4142	8.36	0.25400	0.0100
31	5181	10.6	0.22606	0.0089
32	6473	13.1	0.20320	0.0080
33	8217	16.6	0.18034	0.0071
34	10437	21.1	0.16002	0.0063
36	16447	33.4	0.12700	0.0050