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# Nikrothal LX

## Precision Resistance Wire

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# Nikrothal LX (Precision Resistance Wire)

Excellent temperature coefficient of resistance.

It is used as precision resistance wire for potentiometers and precision wire wound resistors.

Electrical Resistivity [ $\mu\Omega\text{m}$ ]	Average TCR [ $\times 10^{-6}/^{\circ}\text{C}$ ]
*1.33	$\pm 5, \pm 10$

(\* )Reference value

Density g/cm <sup>3</sup> (20°C)	Melting Point °C	Max Operating Temperature °C
8.30	1390	-55~+250

Chemical Composition	C	Si	Mn	Cr	Fe	Al	Ni	Cu
(%)	$\leq 0.02$	0.5~0.7	2.1~2.3	18~20	$\leq 0.1$	2.4~2.6	BAL	1.6~1.8

Alloys	Type	Diameter (mm)
NIKROTHAL LX	Wire	$\phi 0.5 \sim 0.02$

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# Nikrothal LX (Precision Resistance Wire)

## Resistance・Length・Weight

Wire Electrical Resistivity (23°CμΩm) 1.33

Diameter (mm)	Tolerance (mm)	Cross section (mm <sup>2</sup> )	Resistance Tolerance (%)	DC Resistance (Ω/m)	Length (m/Kg)	Weight (g/m)
0.500		0.196	±5	6.77	614	1.63
0.475		0.177	±5	7.51	680	1.47
0.450		0.159	±5	8.36	758	1.32
0.425		0.142	±5	9.38	849	1.18
0.400		0.126	±5	10.6	959	1.04
0.375		0.110	±5	12.0	1091	0.917
0.350		0.0962	±5	13.8	1252	0.799
0.320		0.0804	±5	16.5	1498	0.668
0.300		0.0707	±5	18.8	1704	0.587
0.280		0.0616	±5	21.6	1957	0.511
0.260		0.0531	±5	25.1	2269	0.441
0.250		0.0491	±5	27.1	2454	0.407
0.240		0.0452	±5	29.4	2663	0.375
0.230		0.0415	±5	32.0	2900	0.345
0.220		0.0380	±5	35.0	3169	0.316
0.210		0.0346	±5	38.4	3479	0.287
0.200		0.0314	±5	42.3	3835	0.261
0.190		0.0284	±5	46.9	4249	0.235
0.180		0.0254	±5	52.3	4735	0.211
0.170		0.0227	±5	58.6	5308	0.188
0.160		0.0201	±5	66.1	5992	0.167
0.150		0.0177	±5	75.3	6818	0.147
0.140		0.0154	±5	86.4	7827	0.128
0.130		0.0133	±5	100	9077	0.110
0.120		0.0113	±8	118	10653	0.0939
0.110		0.00950	±8	140	12678	0.0789
0.100		0.00785	±8	169	15340	0.0652
0.090		0.00636	±8	209	18939	0.0528
0.080		0.00503	±8	265	23969	0.0417
0.070		0.00385	±8	346	31307	0.0319
0.060		0.00283	±8	470	42612	0.0235
0.050		0.00196	±8	677	61361	0.0163
0.045		0.00159	±10	837	75754	0.0132
0.040		0.00126	±10	1058	95876	0.0104
0.035		0.000960	±10	1382	125226	0.00799
0.030		0.000707	±10	1882	170447	0.00587
0.028		0.000615	±10	2160	195666	0.00511
0.025		0.000491	±10	2709	245443	0.00407
0.022		0.000380	±10	3499	316946	0.00316
0.020		0.000314	±10	4234	383505	0.00261

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