Scott Precision Wire
End to end

Scott Precision Wire Ltd
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2% Manganese Nickel

The addition of 2% Manganese strengthens and stiffens the material for high temperature use.

2% Manganese Nickel is available in sizes down to 0.10 mm.

Physical and Mechanical Properties

	Units	
Max. continuous operating temperature in air	°C	650
Nominal composition	%	Ni 98 Mn 2 Trace: Fe Si Cu
Density at 20°C	g/cm³	8.81
Resistivity at 20°C	μΩcm	10.9
Temp Coefficient of Resistance, 20 – 100°C	1/K	0.004
Coefficient of thermal expansion, 20 – 400°C	1/K	14.3×10^{-6}
Thermal conductivity at 20°C	W/mK	61
Specific heat capacity at 20°C	kJ/kgK	0.500
Melting point (approx.)	°C	1450
Tensile strength R_m, 0.5 mm wire – annealed	N/mm²	>400
Tensile Strength, 0.5 mm wire – cold worked	N/mm²	700
Elongation at break, 0.5 mm wire - annealed	%	> 25
Elongation at break – cold worked	%	2

The figures given in this table represent nominal or typical values.