

Iron-Nickel Alloy FeNi42(Alloy42) for Vacuum Interrupter

Standard

DIN: Ni42 / 1.3917
 EN: Ni42
 UK: Ni42
 UNS: K94100 (ASTM F30)
 GB/T: 4J42

Applications

Vacuum Interrupter.

Chemical Composition (%)

Ni: 40.5-42.5	P: max. 0.025
Fe: Remainder	S: max. 0.025
Co: max. 0.1	Mn: max. 0.8
C: max. 0.05	Si: max. 0.3
Al: max. 0.1	

Physical Properties

Density (g/cm ³)	8.12
Thermal conductivity@20°C W/(m*K)	10.5
Melting point /(°C)	1430
TCLE/(mkm/m°C)	4.0-5.0
Temperature rate(°C)	20-300

*value for the lowest temper class

Merit

Alloy 42 is a nickel-iron alloy that has a low, and normally constant, coefficient of thermal expansion up to 570 °F (300 °C).

Mechanical Properties

Temper	Tensile Strength Mpa	Yield Strength Mpa	Elongation %	Hardness HV
1/4H	440-590	250-330	min. 23	130-150

Physical properties of the above materials are conventional performance indicators. If you have some special requirements, (for example property and tolerance). Pls contact Kinmachi Company directly, we will give you professional assessments and answers.

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