Invar 36

Invar 36, also known as Alloy 36 or Nilo 36, is a unique iron-nickel alloy with an extremely low coefficient of thermal expansion. It is known for its exceptional dimensional stability and is commonly used in applications that require precise and reliable dimensional control over a wide temperature range.

Chemical Composition

Element	Maximum Unless Range is Specified
Silicon	.35
Carbon	.10
Molybdenum	.50
Phosphorus	.025
Sulfur	.025
Manganese	.60
Chromium	.50
Copper	.50
Nickel	35.0-37.0
Iron	Balance

Physical Properties

Property	Maximum Unless Range is Specified
Density,lbs/in3	0.293
Melting Point (Deg°F)	2605
Coefficient of Thermal Expansion, in/in°F x 10-6	0.8
Electrical Conductivity ,Btu•ft/ft2 •hr•°F	69.3
Modules of Elasticity ,ksi	30,000

Mechanical Properties

Property	Maximum Unless Range is Specified
Ultimate Tensile Strength,ksi	71
Yield Strength,ksi	35
Elongation	42%

The material properties in this datasheet are provided by one of the manufacturers collaborating with Naxtry. Please note that material properties may slightly vary among different manufacturers. Naxtry can accommodate customer requests for specific materials or brands.