

ALLOYS WITH SPECIFIC PHYSICAL PROPERTIES

Application Segments

Engineering

Available Product Variants

Long Products

Product Description

BÖHLER P848 is an iron-48% -nickel alloy with low thermal expansion for applications in the electronics industry, for measuring instruments (e.g. measuring rulers, scales), temperature measuring instruments and temperature-dependent controls, thermostats, thermobimetals and expansion controllers up to temperatures of 450°C. The main application is in glass-metal compounds with soft lead crystal and soda-lime glasses.

The minimum coefficient of thermal expansion of BÖHLER P848 is in the range of 30 to 400°C. Above the break point at slightly above 450°C, the coefficient of expansion increases sharply and at higher temperatures reaches the values usual for austenitic materials. Good low temperature properties.

Process Melting

Airmelted

Applications

> Electronic industry

> Mechanical Engineering

Technical data

Material designation		Standards	
Ni 48	Market grade	SEW 385	Others
1.3922	SEL		
Ni48	EN		

Chemical composition (wt. %)

C	Si	Mn	Ni
max. 0.05	max. 0.30	max. 0.50	min. 46.0

Refers to SEW 385 - 1.3922

Delivery condition

Annealed

Tensile Strength (MPa)	530 to 800
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Round Bars and Wire Rod (if any)

Diameter* mm		
ROLLED		
5.00	-	13.50
15.00	-	125.00
FORGED		
125.10	-	500.00

* Diameter 5.00 - 13.50 mm available as Wire Rod.

Diameter 15.00 - 125 mm available as round bars.

More information regarding MOQ, lengths and tolerances upon request.

If other available product variants are listed in addition to long products, please note that these may differ in terms of melting process, technical data, delivery and surface condition as well as available product dimensions. For mandatory technical specifications, other requirements and dimensions, please contact our regional voestalpine BÖHLER sales companies. The data contained in this brochure is merely for general information and therefore shall not be binding on the company. We may be bound only through a contract explicitly stipulating such data as binding. Measurement data are laboratory values and can deviate from practical analyses. The manufacture of our products does not involve the use of substances detrimental to health or to the ozone layer.