

A2 Stainless Steel



Common Standards

DIN	1.4301
AISI	304

Chemical Content

	%
Carbon (C)	<0.1
Silicon (S)	<1
Manganese (Mn)	<2
Phosphorus (P)	<0.05
Sulphur (S)	0.03
Chromium (Cr)	15 - 20
Molybdenum (Mo)	2 - 3
Nickel (Ni)	8 - 13
Copper (Cu)	4

Physical Properties

	Nominal Value
Density	8000 kg/m ³
Elastic Modulus	193 Gpa
Specific Heat 0-100°C	500 J/kg
Electrical Resistivity	720 nΩ.m

Mechanical Properties

	Nominal Value
Yield Strength	205 Mpa
Tensile Strength	500 - 700 Mpa
Elongation	> 40%
Rockwell Hardness	< 92
Brinell Hardness	< 201
Recommended Temperature Range	-196 - 300°C

Thermal Properties

	Nominal Value
Mean Thermal Expansion	
0 - 100°C	17.2 µm/m/°C
0 - 315°C	18.4 µm/m/°C
0 - 538°C	16.2 µm/m/°C

The information provided in this datasheet is based upon average values and is intended for guidance purposed only. Vital Parts assumes no responsibility or liability for the accuracy of the information contained on this datasheet. Product samples are available for the to determine the suitability of the product for any application.