

Data Sheet: Copper CuNi2SiCrⁱ

Chemical Composition

Element	Cu	Ni	Si	Cr
Percentage	Balance	1.80-3.00	0.40-0.80	0.10-0.80

Properties

Heat treated

Property	Yield strength R _p 0.2 % [MPa] ⁱⁱ	Ultimate tensile strength R _m [MPa] ⁱⁱ	Elongation at Break [%] ⁱⁱ	E-Modulus [%] ⁱⁱ	Density
Value	460-590	590-680	>18	100-150	>99,5%

As manufactured

Property	Yield strength R _p 0.2 % [MPa] ⁱⁱ	Ultimate tensile strength R _m [MPa] ⁱⁱ	Elongation at Break [%] ⁱⁱ	E-Modulus [%] ⁱⁱ	Density
Value	190-250	240-320	>34	80-100	>99,5%

Tolerances

Property	Value as built	Unit
Achievable Part Accuracy ⁱⁱ	+/- 0.3 mm for parts up to 100mm +/- 0.3 % for parts beyond 100mm	mm/ %
Min. Wall thickness	1.0	mm

ⁱ The data from finished parts can deviate from above values depending on the manufacturing process and the component geometry. The data represents our present empirical values. It is incumbent on the person placing the order to examine whether it is suitable for its intended purpose, before using the product. The default postprocessing for this material is support removal and blasting.

ⁱⁱ As a result of the part's geometry, strong tensions may cause distortion in the part which may lead to greater deviation.