

CuNi2Si | Round bars

DATA SHEET



Alloy	CuNi2Si, CW111C
Condition	drawn / extruded
Norm	DIN EN 12163:1998
Tolerance	DIN 1756, h11 Ø 8-10 mm +0/-0.09 mm Ø 11-18 mm +0/-0.11 mm Ø 19-30 mm +0/-0.13 mm Ø 31-50 mm +0/-0.16 mm Ø 51-71 mm +0/-0.19 mm extruded Ø 81-122 mm +0/-1 mm
Electr. Conductivity	IACS app. 34 % / MS/m app. 20
Thermal Conductivity 20 °C	67 to 120 W/m K
Bendability	not suitable
REACH	no obligation
RoHS	conform

Mechanical Properties

	Tensile strength R_m	Yield stress $R_{p0.2}$	Elongation A	Hardness HB
Ø 8-30 mm R640-H180	≥ 640 N/mm ²	≥ 590 N/mm ²	≥ 10 %	180-230
Ø 31-50 mm R600-H165	≥ 600 N/mm ²	≥ 520 N/mm ²	≥ 10 %	165-210
Ø 51-122 mm R550-H150	≥ 550 N/mm ²	≥ 430 N/mm ²	≥ 15 %	150-190

Chemical Analysis

Cu Rest
Ni 1.6-2.5 %
Si 0.4-0.8 %
Mn max. 0.1 %
Fe max. 0.2 %
Pb max. 0.02 %
Others max. 0.3 %

Combines relatively high strength values with relatively good electrical conductivity when cured. Excellent temperature resistance at low and high temperatures up to approx. 450 °C. High wear resistance and corrosion resistance, good sliding properties. Fixing parts that must be corrosion-resistant and have good conductivity. Highly stressed bearing bushings, pressure discs and slipways. Shipbuilding, marine engineering and apparatus engineering.

Comparable Specifications

CuNi2Si, 2.0855, DIN 17666
C64700, C18000 UNS
C102, BS 2872, 2874