

CuAg0,10P

Silver Alloyed Copper: CuAg0,10P is produced in Luvata Pori.

Properties:

- Good electrical conductivity
- Good thermal conductivity
- Excellent formability
- Good weldability
- Excellent machinability
- Excellent corrosion resistance
- Resists hydrogen embrittlement

Composition:

- Cu+ Ag min 99,99
- P content 20 – 30 ppm
- Ag content 800 – 1200 ppm

Electrical conductivity: min 98,3 % IACS

Typical applications:

continuous casting mould

Alloy name **CuAg0,10P**

European standard number	CW016A
UNS code	
Manufacturing location	Pori

Chemical properties	P 0.002-0.003 %
	Ag 0.08-0.12 %

Physical Properties

Density		
g/cm ³		8.9
lb/in ³		0.323
Electrical Conductivity****		
Nominal value in black)	min	98.3
%IACS	min	98.3
Thermal Conductivity		
W/ (m °K)	min	386
Btu/ft h °F	min	223
Modulus of Elasticity		
GPa		117
X1000 ksi		17
Coef. of Thermal Exp. at 20 °C (68 °F)		
10 ⁻⁶ /°C		17.6
10 ⁻⁶ /°F		9.8

Tempers
Mechanical Properties

EN H040 / R200		
Tensile Strength Rm N/mm ²		200 - 250
Yield Strength (0.2 %) N/mm ²	max	100
Elongation % A50 / A	min	- / 42
Hardness (HV)		40 - 65
Thickness mm (Pori)		0.2 - 20
EN H040 / R220		
Tensile Strength Rm N/mm ²		220 - 260
Yield Strength (0.2 %) N/mm ²	max	140
Elongation % A50 / A	min	33 / 42
Hardness (HV)		40 - 65
Thickness mm (Pori)		0.2 - 20
EN H065 / R240		
Tensile Strength Rm N/mm ²		240 - 300
Yield Strength (0.2 %) N/mm ²	min	180
Elongation % A50 / A	min	8 / 15
Hardness (HV)		65 - 95
Thickness mm (Pori)		0.2 - 6, 12 - 25
EN H090 / R290		
Tensile Strength Rm N/mm ²		290 - 360
Yield Strength (0.2 %) N/mm ²	min	250
Elongation % A50 / A	min	4 / 6
Hardness (HV)		90 - 110
Thickness mm (Pori)		0.2 - 25
EN H110 / R360		
Tensile Strength Rm N/mm ²	min	360
Yield Strength (0.2 %) N/mm ²	min	320
Elongation % A50 / A	min	2 /
Hardness (HV)	min	110
Thickness mm (Pori)		0.2 - 20