

Standards

Material No.	EN Material No.	EN Designation	UNS
2.1291	CW105C	CuCr1	C18200
RWMA			
Class 1			

Description

CuCr1 is a low-contained copper alloy and is thermally aged.

Special properties

Good mechanical properties and a high thermal and electrical conductivity. High strength.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
NULL	≤ 0.10	NULL	NULL	NULL
Cr %	Mo %	Ni %	V %	N %
0.30 - 1.20	NULL	NULL	NULL	NULL
Ti ≤ %	Cu %	Al %	Zr %	Co %
NULL	Rest	NULL	NULL	NULL
B %	Fe %	Mg %	W %	Ta %
NULL	≤ 0.08	NULL	NULL	NU
Be %	O %	H %	Pd %	Nb %
NULL	NULL	NULL	NULL	NULL
Ce %	Pb %	Zn %	Y %	La %
NULL	NULL	NULL	NULL	NULL

Mechanical Properties 20°C

Hardness HB 30 ≤ HB	0.2% Yield strength R _p ≥ N/mm ²	Tensile strength R _m N/mm ²	Elongation A ₅ ≥ %	Resistant on air up to °C
145	310	≥ 400	12	NULL
Modulus of elasticity kN/mm ²				
117				

Physical Properties 20°C

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m	Electrical conductivity MS/m
8.9	385	320-330	0.022	> 47

Suitable welding filler materials

NULL

Application

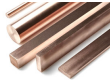
Electrical engineering, spot welding (automotive industry)

Available forms for 2.1291
/ CuCr1

Sheets/Plates



Bars



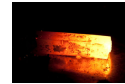
Wire



Tubes/Pipes



Forged / cast
parts



Finished part
(drawing)

