

Technical Data Sheet

AMPCOLOY[®] 972

Extruded and drawn rounds



Nominal composition:

Chromium	(Cr)	1.00%
Zirconium	(Zr)	0.1%
Others		max. 0.2%
Copper	(Cu)	balance

Specifications:

EN	CW 106C	
D	DIN 44759 A 2/2	17666 W.Nr. 2.1293
F	AFNOR	UC1Zr
GB	BS	
USA	CDA RWMA	C18150, C18200, C18400 Class2, CuCr1Zr

Mechanical and physical properties	Units	Ø 0.40" – 1"	Ø 1" - 2"	2" – 4 3/4" *
Tensile strength Rm	KSI	75	70	67
Yield strength Rp 0.5	KSI	68	60	59
Elongation A5	%	20	20	18
Brinell hardness	BHN 10	152	142	125
Rockwell hardness	HRB	82	79	72
Modulus of elasticity E	KSI	17000	17000	17000
Density ρ	LBS / IN ³	0.32		
Coefficient of expansion α	IN / IN / °F	9.44 · 10 ⁻⁶		
Thermal conductivity λ	CGS	0.765		
Electrical resistivity γ (1mm ² section)	Microhms/ m	19.6		
Electrical conductivity	% I.A.C.S.	86		
Specific heat Cp	BTU / LB · °F	0.091		

Assurances given with respect to properties or uses are subject to written approval from AMPCO METAL.

* Over 3" diameter extruded only

AMPCOLOY[®] 972 is a precipitation hardening copper-base alloy. In the heat treated condition, this alloy retains the mechanical properties together with a good ductility in the range of 300-500°C. High electrical conductivity and high mechanical properties are attributes of this versatile alloy.

APPLICATIONS:

- Resistance welding tips
- Electrode caps for the automotive industry
- Tong arms for welding robots
- Electrode holders
- Parts for the energy engineering
- Press parts

AMPCO METAL EXCELLENCE IN ENGINEERED ALLOYS

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