

Alloy Designation	
EN	CuBe2Pb / CW102C
DIN	CuBe2Pb / 2.1248
UNS	C17300 ASTM B197/B197M
JIS	C1730

Chemical Composition		
Be	1.8 - 2.0	%
Ni+Co	min 0.2	%
Ni+Co+Fe	max. 0.6	%
Pb	0.2 - 0.6	%
Si	max 0.2	%
Al	max 0.2	%
Cu	Remainder	%

Characteristics
C17300 is an age-hardened alloy having developed higher strengths while maintaining acceptable levels of toughness for many industrial applications. The age-hardening response of this alloy depends on the factors of time, temperature, and cold work applied to the metal. Toughness, fatigue strength, corrosion resistance, etc., can be modified and controlled by either under-aging or over-aging during the precipitation hardening process of the alloy.

Main Applications
Industrial: Spline Shafts, Pump Parts, Valves, Non Sparking Safety Tools, Flexible Metal Hose, Bushings, Rolling Mill Parts, Electrochemical Springs, Pumps, Shafts, Springs, Bellows, Welding Equipment, Diaphragms, Bourdon Tubing
Electrical: Contact Bridges, Electrical Switch and Relay Blades, Electric Motor Components, Navigational Instruments, Clips, Electrical Connectors, Connectors, Relay Parts, Switch Parts, Fuse Clips
Fasteners: Washers, Screws, Bolts, Retaining Rings, Roll Pins, Lock Washers, Fasteners

Physical Properties (Reference values at room temperature)		
Density	g/cm ³	8.25
Electrical conductivity	IACS%(20°C)*	15 - 28
Modulus of elasticity	KN/mm ²	130
Coefficient of thermal expansion	10 ⁻⁶ /K	17.8
Thermal conductivity	W/(m*K)	105

*value for the lowest temper class

Mechanical Properties				
TEMPER	Tensile Strength Mpa	Yield Strength Mpa	Elongation %	Hardness Hv
TB00	400 - 540	140	min. 30	/
TD04	965 - 1140	910	min. (1-6)	/
TF00	1105 - 1380	1010	min. 3	/
TH04	1345 - 1585	1260	min. 1	/

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