CB4
CuCO2Be

Applications properties:
- High mechanical properties
- Suitable electrical and thermal properties
- Good anti-friction properties

Physical properties:

Specific gravity	8,9
Coefficient of expansion 20 to 300° C x 10^{-6}	17,5
Young's modulus N/mm²	130 000
Thermal conductivity W/(mK)	200
Resistivity micro ohm.cm	4
Electrical conductivity (%IACS)	43
Magnetic permeability	1,01

Alloy properties:
- Wrought Copper Cobalt Beryllium structural hardening alloy
- Transformation by extrusion, forging or die stamping followed by quenching and hardening, plus cold-drawing for small diameters
- Suitable for cold forming in quenched condition, but the hardened condition must be obtained after forming
- Suitable for hard brazing, but loss of mechanical properties

Applications:
- Plungers for die casting
- Resistance welding of thick plates or stainless steel
- Head of pistons for diesel engine
- Die for continuous casting ingot
- Short circuit ring for squirrel cage motors

Nominal composition:
Weight%

Cobalt	2,2
Beryllium	0,5
Cu	Balance

International standards:

BS 2874 CC 112
DIN 17666 wn 2.1285
DIN 17672- DIN 44759
ISO 1187- NFA 82100
ASTM B441- B534- B 870: C 17500
MIL 46087- RWMA class 3
SAE CA 184

Available forms, mechanical properties:

Size/condition	Rods (Extruded or forged)	Rods (Drawn)	Tubes (extruded)	Tubes (Drawn)	Forgings or stamped parts	Tensile strength (Mpa ≥ ; * = Mpa ≤)	Tensile strength (ksi ≥ ; * = Mpa ≤)	Yield strength 0,2% offset or 0,5% E.U.L. [1] (Mpa ≥)	Yield strength (ksi ≥)	Elongation 5,65 √S (% ≥)	Hardness (HB)	Hardness (HRB)	Hardness (HV5)	Impact strength KCU [1] or IZOD [2]	Rounds	Squares	Flats	Hexagones	Section	Tubes	Plates	Discs	Rings	Forged blanks	stamped	machined
section< 1000 mm² - < 1,550 in.² TR or TER condition						700	101	650	94	10	240					▾	▾	▾	▾	▾		▾	▾	▾	▾	▾	▾
section ≥ 1000 mm² - ≥ 1,550 in.² TR condition						700	101	550	80	15	220																

Do you want to know more, discuss a project with us or make a request for quotation?

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