

Bismuth Bronze & Brass

Copper Alloy Number	Composition (% maximum except as indicated)														Sand Cast Mechanical Properties Minimum				Pour Temperature [F]	
	Copper (Cu)	Tin (Sn)	Lead (Pb)	Zinc (Zn)	Iron (Fe)	Nickel (Ni) incl Co	Aluminum (Al)	Silicon (Si)	Antimony (Sb)	Sulfur (S)	Phosphorus (P)	Bismuth (Bi)	Other	Total Named Elements	Tensile ksi	Yield ksi	Elongation %	Brinell 500 kg Load	Light Castings	Heavy Castings
C89320	87.0-91.0	5.0-7.0	0.09	1.0	0.20	1.0	0.005	0.005	0.35	0.08	0.30	4.0 -6.0		99.5	none available					
C89833	86.0-91.0	4.0-6.0	0.09	2.0-6.0	0.30	1.0	0.005	0.005	0.25	0.08	0.050	1.7-2.7		99.3	30	14	16			
C89836	87.0-91.0	4.5-7.0	0.09	2.0-4.0	0.35	0.90	0.005	0.005	0.25	0.08	0.06	1.5-2.5		99.5	33	14	20			
C89842	78.0-82.0	2.0-3.0	0.09	balance	0.30	0.10-0.50	0.005	0.005	0.05		0.005-0.02	1.5-2.5		99.5	none available					
C89844	83.0-86.0 incl Ni	3.0-5.0	0.20	7.0-10.0	0.30	1.0	0.005	0.005	0.25	0.08	0.05	2.0-4.0		99.3	28	13	15			
C89940	64.0-68.0	3.0-5.0	0.01	3.0-5.0	0.7-2.0	20.0-23.0	0.005	0.15	0.10	0.05	0.10-0.15	4.0-5.5	0.20 Mn	99.5	check CDA for typical props					