

## Bismuth Bronze & Brass

Copper Alloy Number	Composition (% maximum except as indicated)														Sand Cast Mechanical Properties				Pour Temperature		
	Copper (Cu)	Tin (Sn)	Lead (Pb)	Zinc (Zn)	Iron (Fe)	Nickel (Ni) incl Co	Aluminum (Al)	Silicon (Si)	Antimony (Sb)	Sulfur (S)	Phosphorous (P)	Bismuth (Bi)	Other	Total Named Elements	Tensile ksi	Yield ksi	Elongation %	Brinell 500 kg Load	Light Castings	Heavy Castings	
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	0.25	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				
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				