



Dick@castingreps.com
 www.castingreps.com
 142 Main St. Suite 302
 Nashua, NH 03060
 (603) 889-5422

Bronze and Brass Mechanical Properties

Mechanical Properties are cast as sand unless otherwise noted

Family	CDA	Tensile Strength		Yield Strength		Elongation		Brinell Hardness 10mm-50kg typ.	Compress Strain P.S.I.-.001" Set	Impact Strain IZOD-Ft. lbs.	Density Lbs.Per Cu. In.	Machinability Rating	
		Min. (ksi)	Typ. (ksi)	Min. (ksi)	Typ. (ksi)	Min. (ksi)	Typ. (ksi)					Free Cut	Yb-100
Red Brass	C83300		32		10		35				0.318		35
	C83450	30	37	14	15	25	31	62	10		0.319		75
	C83600	30	37	14	17	20	30	60	14	10	0.318		84
	C83800	30	35	13	16	20	25	60	12	8	0.312		90
Semi Red Brass	C84400	29	34	13	15	18	26	55		8	0.314		90
	C84500		35		14		28	55			0.312		90
	C84800	28	37	12	14	16	35	55	13		0.31		80
Yellow Brass	C85200	35	38	12	13	25	35	45	9		0.307		80
	C85400	30	34	11	12	20	35	50	9		0.305		80
	C85700	40	50	14	18	15	40	75			0.304		80
	C85800		48*		28*		9*				0.305		80
Manganese Bronze	C86200	90	95	45	48	18	20	180^	50	12	0.288		30
	C86300	110	119	60	67	12	18	225^	60	15	0.283		80
	C86400	60	65	20	25	15	20	105^	22	30	0.301		65
	C86500	65	71	25	29	20	30	100	24		0.301		26
	C86700	80	85	32	42	15	20	155^			0.301		55
Copper-Silicon	C87500	60	67	24	30	16	21	115	27		0.299		50
	C87610	45	58	18	25	20	35	110			0.302		40
Copper-Bismuth	C89320	35**	40**	18**	20**	15**	30**	70**			0.318		80
	C89325	30	35	12	18	15	20	73		6	0.323		80
	C89831	29	34	13	15	16	20	55	13		0.318		85
	C89833	30	37	14	17	20	28	60	15		0.317		81
	C89835	30	35	14	18	15	20	65	20		0.321		70
	C89837	30	37	14	17	20	32	60	13		0.313		66
Copper-Bismuth Selenium	C89510		35		18		20	55			0.313		75
	C89520		31		18		15	54			0.314		85
Tin Bronze	C90300	40	45	18	21	20	30	70	13		0.318		30
	C90500	40	45	18	22	20	25	75		10	0.315		30
	C90700	35	44	18	22	10	20	80			0.317		20
	C91600	35	44	17	22	10	16	85			0.32		20
Leaded Tin Bronze	C92200	34	40	16	20	22	30	65	15		0.312		42
	C92300	36	40	16	20	18	25	70	10	12	0.317		42
	C92600	40	44	18	20	20	30	70	12	7	0.315		40
	C92700	35	42	18	21	10	20	77			0.317		45
High Leaded Tin Bronze	C93200	30	35	14	18	15	20	65		6	0.322		70
	C93400	25	32	12	16	8	20	60		5	0.32		70
	C93500	28	32	12	16	15	20	60	13		0.32		70
	C93600	32**	35**	16**	21**	10**	15**	65**			0.325		80
	C93700	30	35	12	18	15	20	60	13	5	0.32		80
	C93800	26	30	14	16	12	18	55	12	5	0.334		80
	C94300	21	27		13	10	15	48	11	5	0.336		80
Aluminum Bronze	C95200	65	80	25	27	20	35	125^	27	30	0.276		20
	C95300	65	75	25	27	20	25	140^	20	28	0.272		55
	C95400	65	75	25	27	20	25	140^	20	28	0.272		55
	C95400	75	85	30	35	12	18	170^		16	0.269		60
	C95500	90	100	40	44	6	12	195^		13	0.272		50
	C95600	60	75	28	34	10	18	140^			0.278		60
	C95600	60	75	28	34	10	18	140^			0.278		60
	C95800	85	95	35	38	15	25	159^	35	20	0.276		20
Copper Nickel	C96200		25		20						0.323		10
	C96400	60	68	32	37	20	28	140^			0.323		20
Nickel Silver	C97300	30	35	15	17	8	20	55			0.321		70
	C97600	40	45	17	24	10	20	80			0.321		70
	C97800	50	55	22	30	10	15	130^			0.32		60