



# BUNTING®

Product Catalog

***Certified to ISO 9001:2000***

CAST BRONZE  
BEARINGS

CONTINUOUS AND  
CENTRIFUGAL CAST  
BRONZE BARS

ALUMINUM BRONZE  
BAR AND WEARPLATE

POWDERED METAL  
PRODUCTS

LUBE-ALIGN  
MOUNTED BEARINGS

ENGINEERED  
PLASTIC BEARINGS

# Bunting C93200 Continuous Cast and Centrifugal Cast Bronze Bars

Bunting continuous cast bronze bars of C93200 (SAE 660) bronze give superior quality and performance. Continuous casting achieves a high density grain structure, free of porosity, resulting in a reduction of tool wear and component rejects.

Cored and solid bars are stocked in 13" and 105" lengths and are available in other lengths. When you need a moderate quantity of special bearings, Bunting bar stock can provide an economical alternative to expensive tooling. Consider bars for use when you need special bearings, bearings for prototypes, or for emergency repairs.

Centrifugal cast large diameter cored bars are also available as standard stock items in 13" lengths.

Contact your local Bunting Bearings Authorized Distributor or Regional Service Center for more information.

## C93200 Continuous Cast and Centrifugal Cast Bronze Bars Engineering Data

### Typical Properties

Note: Not to be used for specification purposes.

### Chemical Composition

Copper .....	81.0 - 85.0%
Tin .....	6.3 - 7.5%
Lead .....	6.0 - 8.0%
Zinc .....	2.0 - 4.0%

### Minimum Physical Properties

Tensile Strength, PSI .....	35,000
Yield Strength, PSI .....	20,000
Elongation in 2" .....	10%
Brinell @ 500 KG Load .....	65

**Maximum Operating Temperature for C93200 (SAE 660) = 450° F+**

**Comparable Alloy Specifications:** C93200; SAE 660

**Common Continuous Cast Manufacturing Specifications:**

ASTM B505; QQ-C-390B, Type III

### Nominal Stock Allowances

O.D. up to 4" .....	1/32" I.D. and O.D.
O.D. 4" to 5" .....	1/16" I.D. and O.D.
O.D. 5" + .....	3/32" I.D. and O.D.

**Comparable Alloy Specifications:** C93200; SAE 660

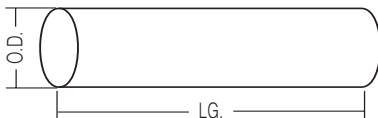
**Common Centrifugal Cast Manufacturing Specifications:**

ASTM B271; QQ-C-390, Type II

### Nominal Stock Allowances

O.D. ....	.090/.100"
I.D. ....	.100/.125"

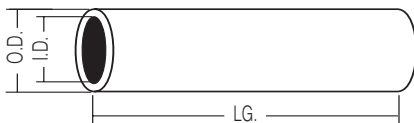
## C93200 Continuous Cast Bronze Solid Bars



PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"
	I.D.	O.D.		
BS 3	SOLID	3/8	.6	5
BS 4		1/2	1.0	8
BS 5		5/8	1.5	12
BS 6		3/4	2.1	17
BS 7		7/8	2.8	23
BS 8	SOLID	1	3.6	29
BS 9		1-1/8	4.5	37
BS 10		1-1/4	5.5	45
BS 11		1-3/8	6.6	54
BS 12		1-1/2	7.9	64
BS 13		1-5/8	9.2	75
BS 14		1-3/4	10.6	87
BS 15		1-7/8	12.2	100
BS 16	SOLID	2	13.8	113
BS 17		2-1/8	15.6	127
BS 18		2-1/4	17.4	142
BS 19		2-3/8	19.4	158
BS 20		2-1/2	21.4	175
BS 21		2-5/8	23.6	193
BS 22		2-3/4	25.8	211
BS 24		SOLID	3	30.7
BS 26	3-1/4		35.9	294

PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"
	I.D.	O.D.		
BS 28	SOLID	3-1/2	41.6	340
BS 30		3-3/4	47.7	390
BS 32	SOLID	4	55.2	451
BS 34		4-1/4	62.2	508
BS 36		4-1/2	69.6	569
BS 38		4-3/4	77.4	633
BS 40	SOLID	5	86.5	702
BS 44		5-1/2	105.9	859
BS 48	SOLID	6	124.2	1015
BS 52		6-1/2	145.3	1188
BS 56	SOLID	7	168.1	1375
BS 60		7-1/2	192.6	1575
BS 64	SOLID	8	218.8	1789
BS 72	SOLID	9	276.1	2257
BS 80	SOLID	10	340.5	2784
BS 88	SOLID	11	403.0	3276
BS 96	SOLID	12	479.0	3892

## C93200 Continuous Cast Bronze Cored Bars



PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"
	I.D.	O.D.		
BC 408	1/2	1	2.9	24
BC 409		1-1/8	3.8	31
BC 410		1-1/4	4.8	40
BC 412		1-1/2	7.2	59
BC 414		1-3/4	9.9	81
BC 416		2	13.1	107

PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"
	I.D.	O.D.		
BC 508	5/8	1	2.5	20
BC 509		1-1/8	3.4	28
BC 510		1-1/4	4.4	36
BC 511		1-3/8	5.5	45
BC 516		2	12.7	103

# C93200 Continuous Cast Bronze Cored Bars



PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"
	I.D.	O.D.		
BC 608	3/4	1	1.9	16
BC 609		1-1/8	2.8	23
BC 610		1-1/4	3.7	32
BC 611		1-3/8	5.0	41
BC 612		1-1/2	6.0	51
BC 614		1-3/4	9.0	73
BC 616		2	12.2	99
BC 618		2-1/4	15.2	129
BC 620		2-1/2	19.8	162
BC 622		2-3/4	24.2	198
BC 709	7/8	1-1/8	2.2	18
BC 710		1-1/4	3.2	26
BC 711		1-3/8	4.4	36
BC 712		1-1/2	5.6	46
BC 713		1-5/8	6.9	57
BC 714		1-3/4	8.3	68
BC 716		2	11.5	94
BC 810	1	1-1/4	2.5	20
BC 811		1-3/8	3.6	30
BC 812		1-1/2	4.8	40
BC 813		1-5/8	6.2	50
BC 814		1-3/4	7.4	62
BC 816		2	10.8	88
BC 818		2-1/4	14.4	118
BC 819		2-3/8	16.3	134
BC 820		2-1/2	18.4	150
BC 822		2-3/4	22.8	187
BC 824		3	27.7	226
BC 826		3-1/4	32.9	269
BC 828		3-1/2	38.6	316
BC 832		4	52.1	426
BC 911		1-1/8	1-3/8	2.8
BC 912	1-1/2		4.0	33
BC 913	1-5/8		5.3	44
BC 915	1-7/8		8.3	68
BC 916	2		9.9	81
BC1012	1-1/4	1-1/2	3.0	25
BC1013		1-5/8	4.4	36
BC1014		1-3/4	5.8	48
BC1015		1-7/8	7.4	60
BC1016		2	9.0	74
BC1018		2-1/4	12.6	103
BC1020		2-1/2	16.6	136
BC1022		2-3/4	21.0	172
BC1024		3	25.9	212

PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"
	I.D.	O.D.		
BC1026	1-1/4	3-1/4	31.1	255
BC1028		3-1/2	36.8	301
BC1032		4	50.7	414
BC1113	1-3/8	1-5/8	3.3	27
BC1114		1-3/4	4.8	39
BC1115		1-7/8	6.3	52
BC1116		2	7.9	65
BC1117		2-1/8	9.7	79
BC1118		2-1/4	11.5	94
BC1120		2-1/2	15.5	127
BC1124	3	24.8	203	
BC1214	1-1/2	1-3/4	3.6	29
BC1215		1-7/8	5.1	42
BC1216		2	6.8	55
BC1217		2-1/8	8.5	70
BC1218		2-1/4	10.4	85
BC1219		2-3/8	12.3	101
BC1220		2-1/2	14.4	118
BC1222		2-3/4	18.8	154
BC1224		3	23.7	194
BC1226		3-1/4	28.9	237
BC1228	3-1/2	34.6	283	
BC1230	3-3/4	40.7	333	
BC1232	4	48.5	397	
BC1236	4-1/2	62.9	514	
BC1316	1-5/8	2	5.5	45
BC1317		2-1/8	7.3	59
BC1318		2-1/4	9.1	75
BC1320		2-1/2	13.1	107
BC1322		2-3/4	17.6	144
BC1324		3	22.4	183
BC1416	1-3/4	2	4.2	34
BC1417		2-1/8	5.9	48
BC1418		2-1/4	7.8	63
BC1419		2-3/8	9.7	79
BC1420		2-1/2	11.8	96
BC1421		2-5/8	13.9	114
BC1422		2-3/4	16.2	132
BC1424		3	21.0	172
BC1426		3-1/4	26.3	215
BC1428		3-1/2	32.0	261
BC1430		3-3/4	38.1	311
BC1432		4	46.0	376
BC1434	4-1/4	52.9	433	



## C93200 Continuous Cast Bronze Cored Bars

PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"	
	I.D.	O.D.			
BC1518	1-7/8	2-1/4	6.3	51	
BC1519		2-3/8	8.2	67	
BC1520		2-1/2	10.3	84	
BC1521		2-5/8	12.5	102	
BC1524		3	19.6	160	
BC1618	2	2-1/4	4.7	39	
BC1619		2-3/8	7.0	57	
BC1620		2-1/2	8.7	71	
BC1621		2-5/8	10.9	89	
BC1622		2-3/4	13.1	108	
BC1623		2-7/8	15.5	127	
BC1624		3	18.0	147	
BC1626		3-1/4	23.3	190	
BC1628		3-1/2	28.9	237	
BC1630		3-3/4	35.0	286	
BC1632		4	43.0	351	
BC1636		4-1/2	57.4	469	
BC1640		5	74.4	604	
BC1644		5-1/2	94.4	766	
BC1648		6	112.5	920	
BC1721		2-1/8	2-5/8	9.2	75
BC1722			2-3/4	11.5	94
BC1723	2-7/8		13.8	113	
BC1822	2-1/4	2-3/4	9.7	79	
BC1823		2-7/8	12.1	99	
BC1824		3	14.5	119	
BC1826		3-1/4	19.8	162	
BC1828		3-1/2	25.5	208	
BC1830		3-3/4	31.6	258	
BC1832		4	39.6	324	
BC1834		4-1/4	46.6	381	
BC1923	2-3/8	2-7/8	10.2	83	
BC1924		3	12.7	104	
BC1926		3-1/4	17.9	147	
BC1928		3-1/2	23.6	193	
BC2023	2-1/2	2-7/8	8.6	70	
BC2024		3	10.7	87	
BC2025		3-1/8	13.2	108	
BC2026		3-1/4	15.9	130	
BC2028		3-1/2	21.6	177	
BC2030		3-3/4	27.7	227	
BC2032		4	35.8	293	
BC2034		4-1/4	42.8	350	
BC2036		4-1/2	50.2	410	
BC2038		4-3/4	58.0	474	

PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"
	I.D.	O.D.		
BC2040	2-1/2	5	67.3	546
BC2044		5-1/2	87.4	709
BC2048		6	105.4	862
BC2128	2-5/8	3-1/2	19.5	160
BC2226	2-3/4	3-1/4	12.3	101
BC2228		3-1/2	17.3	142
BC2230		3-3/4	23.4	191
BC2232		4	31.6	258
BC2234		4-1/4	38.5	315
BC2236		4-1/2	45.9	376
BC2238		4-3/4	53.8	440
BC2332	2-7/8	4	29.3	240
BC2428	3	3-1/2	12.6	103
BC2429		3-5/8	16.1	131
BC2430		3-3/4	18.7	153
BC2432		4	26.9	220
BC2434		4-1/4	33.9	277
BC2436		4-1/2	41.3	338
BC2438		4-3/4	49.1	402
BC2440		5	58.4	474
BC2444		5-1/2	78.6	638
BC2448		6	96.7	790
BC2452	6-1/2	117.8	963	
BC2456	3	7	141.1	1140
BC2464		8	197.5	1580
BC2630	3-1/4	3-3/4	14.0	114
BC2632		4	21.9	179
BC2634		4-1/4	28.8	236
BC2636		4-1/2	36.2	296
BC2638		4-3/4	44.1	360
BC2640		5	53.4	433
BC2644		5-1/2	73.6	597
BC2832		3-1/2	4	16.4
BC2834	4-1/4		23.4	191
BC2836	4-1/2		30.8	252
BC2838	4-3/4		38.6	316
BC2840	5		47.8	388
BC2844	5-1/2		67.0	554
BC2848	6		86.3	705
BC2852	6-1/2		107.4	878
BC3036	3-3/4	4-1/2	24.9	203
BC3038		4-3/4	32.7	267
BC3040		5	41.9	340
BC3044		5-1/2	62.4	506

# C93200 Continuous Cast Bronze Cored Bars



PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"	
	I.D.	O.D.			
BC3048	3-3/4	6	80.4	658	
BC3236	4	4-1/2	18.6	152	
BC3238		4-3/4	26.4	216	
BC3240		5	35.6	289	
BC3242		5-1/4	47.0	381	
BC3244		5-1/2	56.2	456	
BC3248		6	74.2	607	
BC3252		6-1/2	95.4	780	
BC3256		7	118.2	966	
BC3260		7-1/2	142.7	1167	
BC3264		8	168.8	1380	
BC3272		9	229.3	1861	
BC3438		4-1/4	4-3/4	20.5	166
BC3440			5	28.8	234
BC3442			5-1/4	40.3	327
BC3444	5-1/2		49.4	401	
BC3448	6		67.6	552	
BC3452	6-1/2		88.7	725	
BC3640	4-1/2	5	21.7	176	
BC3644		5-1/2	42.4	344	
BC3648		6	60.5	495	
BC3652		6-1/2	81.6	668	
BC3656		7	104.5	854	
BC3846		4-3/4	5-3/4	44.5	361
BC3848	6		53.0	433	
BC3852	6-1/2		74.2	606	
BC4044	5	5-1/2	27.0	219	
BC4048		6	45.1	369	
BC4052		6-1/2	66.2	542	
BC4056		7	89.1	728	
BC4060		7-1/2	113.6	929	
BC4064		8	139.7	1142	
BC4072		9	197.0	1611	
BC4080		10	261.6	2139	
BC4256		5-1/4	7	80.8	660
BC4448		5-1/2	6	29.5	239
BC4452	6-1/2		49.2	402	
BC4456	7		72.0	589	
BC4460	7-1/2		96.5	789	
BC4464	8		122.7	1003	

PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"
	I.D.	O.D.		
BC4654	5-3/4	6-3/4	51.3	419
BC4660		7-1/2	87.4	714
BC4664		8	113.5	928
BC4852	6	6-1/2	30.9	247
BC4854		6-3/4	41.7	341
BC4856		7	53.3	436
BC4860		7-1/2	77.8	636
BC4864		8	103.9	850
BC4868		8-1/2	131.8	1077
BC4872		9	161.2	1318
BC4880		10	225.9	1847
BC4888		11	300.0	2443
BC4896		12	378.0	3074
BC5260	6-1/2	7-1/2	57.4	469
BC5264		8	83.6	683
BC5268		8-1/2	110.5	903
BC5272		9	140.8	1152
BC5276		9-1/2	175.4	1417
BC5664	7	8	61.5	503
BC5668		8-1/2	91.0	738
BC5672		9	118.8	971
BC5676		9-1/2	153.0	1236
BC5680		10	183.5	1501
BC5688		11	258.3	2100
BC5696		12	336.0	2730
BC6068		7-1/2	8-1/2	67.9
BC6076	9-1/2		129.0	1042
BC6084	10-1/2		198.0	1613
BC6472	8	9	69.7	570
BC6476		9-1/2	103.3	834
BC6480		10	134.5	1100
BC6484		10-1/2	171.0	1394
BC6488		11	202.2	1644
BC6496		12	285.4	2320
BC6876		8-1/2	9-1/2	75.8
BC6884	10-1/2		144.4	1174
BC6892	11-1/2		220.0	1792
BC7280	9	10	78.8	645
BC7284		10-1/2	112.3	913
BC7288		11	152.0	1236
BC7292		11-1/2	192.0	1560
BC7296		12	229.6	1867



## C93200 Continuous Cast Bronze Cored Bars

PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"
	I.D.	O.D.		
BC7684 BC7688 BC7692 BC76100	9-1/2	10-1/2 11 11-1/2 12-1/2	82.7 120.5 159.0 238.8	672 980 1293 1975
BC8088 BC8092 BC8096 BC80112	10	11 11-1/2 12 14	86.7 128.0 162.4 340.1	705 1037 1320 2800
BC8492 BC8496	10-1/2	11-1/2 12	96.0 136.0	782 1104

PART NUMBER	NOMINAL		AVG. WT. 13"	AVG. WT. 105"
	I.D.	O.D.		
BC84100 BC84104	10-1/2	12-1/2 13	173.3 216.1	1432 1780
BC8896 BC88112	11	12 14	94.0 274.0	773 2241
BC92104	11-1/2	13	144.0	1200
BC96112 BC96120	12	14 15	195.9 293.1	1631 2421
BC104120	13	15	211.0	1760

OTHER LENGTHS, ALLOYS, AND SIZES ARE ALSO AVAILABLE.  
ALL WEIGHTS SHOWN ARE APPROXIMATE WEIGHTS.



## C93200 Centrifugal Cast Bronze Cored Bars

PART NUMBER	NOMINAL		AVG. WT. 13"
	I.D.	O.D.	
MC40084 MC40088 MC40092 MC40096 MC40100	5	10-1/2 11 11-1/2 12 12-1/2	291 331 369 408 449
MC44080 MC44084 MC44088 MC44092 MC44096 MC44100	5-1/2	10 10-1/2 11 11-1/2 12 12-1/2	243 278 314 351 391 432
MC48084 MC48092 MC48100 MC48104	6	10-1/2 11-1/2 12-1/2 13	259 333 413 456
MC52080 MC52084 MC52088 MC52092 MC52096	6-1/2	10 10-1/2 11 11-1/2 12	204 239 275 312 352

PART NUMBER	NOMINAL		AVG. WT. 13"
	I.D.	O.D.	
MC52100 MC52104	6-1/2	12-1/2 13	393 436
MC56084 MC56092 MC56100 MC56104	7	10-1/2 11-1/2 12-1/2 13	217 290 371 414
MC60080 MC60088 MC60092 MC60096 MC60100 MC60104 MC60108	7-1/2	10 11 11-1/2 12 12-1/2 13 13-1/2	159 229 267 306 347 390 434
MC64092 MC64100 MC64104 MC64108	8	11-1/2 12-1/2 13 13-1/2	241 322 365 409
MC68080 MC68088	8-1/2	10 11	106 177

# C93200 Centrifugal Cast Bronze Cored Bars



PART NUMBER	NOMINAL		AVG. WT. 13"
	I.D.	O.D.	
MC68096	8-1/2	12	254
MC68100		12-1/2	295
MC68104		13	338
MC68108		13-1/2	382
MC68112		14	428
MC72100	9	12-1/2	266
MC72104		13	309
MC72108		13-1/2	353
MC72112		14	399
MC76096	9-1/2	12	195
MC76104		13	279
MC76108		13-1/2	323
MC76112		14	369
MC80100	10	12-1/2	204
MC80104		13	247
MC80108		13-1/2	291
MC84108	10-1/2	13-1/2	257
MC84112		14	303
MC84116		14-1/2	351
MC84120		15	400
MC88100		11	12-1/2
MC88104	13		178
MC88108	13-1/2		222
MC88116	14-1/2		316
MC88120	15		365
MC92100	11-1/2		12-1/2
MC92108		13-1/2	185
MC92112		14	231
MC92116		14-1/2	279
MC92120		15	328
MC96104		12	13
MC96108	13-1/2		146
MC96116	14-1/2		240
MC96124	15-1/2		340
MC96128	16		393

PART NUMBER	NOMINAL		AVG. WT. 13"	
	I.D.	O.D.		
MC100108	12-1/2	13-1/2	106	
MC100112		14	152	
MC100116		14-1/2	200	
MC100120		15	249	
MC100124		15-1/2	300	
MC100128		16	353	
MC104112	13	14	110	
MC104116		14-1/2	158	
MC104124		15-1/2	258	
MC104128		16	311	
MC108116	13-1/2	14-1/2	114	
MC108120		15	164	
MC108124		15-1/2	215	
MC108128		16	267	
MC108132		16-1/2	322	
MC108136		17	378	
MC112120		14	15	118
MC112124	15-1/2		169	
MC112128	16		222	
MC112132	16-1/2		276	
MC112136	17		332	
MC116124	14-1/2		15-1/2	122
MC116128		16	175	
MC116132		16-1/2	229	
MC116136		17	285	
MC120128		15	16	127
MC120132	16-1/2		181	
MC120136	17		237	
MC120140	17-1/2		294	
MC120144	18		354	
MC120148	18-1/2		415	
MC124132	15-1/2		16-1/2	131
MC124136			17	187
MC124140		17-1/2	244	
MC124144		18	304	
MC124148		18-1/2	364	



## C93200 Centrifugal Cast Bronze Cored Bars

PART NUMBER	NOMINAL		AVG. WT. 13"
	I.D.	O.D.	
MC128136	16	17	135
MC128140		17-1/2	192
MC128144		18	252
MC128148		18-1/2	313
MC128152		19	375
MC132140	16-1/2	17-1/2	139
MC132144		18	198
MC132148		18-1/2	259
MC132152		19	322
MC132156		19-1/2	386
MC136144	17	18	143
MC136148		18-1/2	204
MC136152		19	266

PART NUMBER	NOMINAL		AVG. WT. 13"
	I.D.	O.D.	
MC136156	17	19-1/2	331
MC140148	17-1/2	18-1/2	147
MC140152		19	210
MC140156		19-1/2	274
MC140160		20	340
MC144152	18	19	151
MC144156		19-1/2	215
MC144160		20	281
MC148156	18-1/2	19-1/2	155
MC148160		20	221
MC152160	19	20	159

OTHER LENGTHS, ALLOYS AND SIZES ARE ALSO AVAILABLE.  
ALL WEIGHTS SHOWN ARE APPROXIMATE WEIGHTS.