



# C95510

# NICKEL ALUMINUM BRONZE (AMS 4880)

[WWW.NBMMETALS.COM](http://WWW.NBMMETALS.COM)

LEADING MANUFACTURER & MASTER DISTRIBUTOR OF BRASS, BRONZE, & COPPER ALLOYS



## Offered in solid & hollow bars.

This is one of the most popular landing gear bushing materials specified today along with C63000 material. This continuous / centrifugal cast alloy is heat treated and exhibits high mechanical strength which meets the properties of C63000 (AMS 4640). In many cases C95510 (AMS 4880) can be substituted for C63000 with the advantage of this material being available in tube form, which provides economic cost savings for you, the customer.

### Sizes Available From NBM

SOLID BAR . . . . . 1/2" - 12" diameter  
HOLLOW BAR . . . . . thru 10" O.D.

### Spec Equivalents

**Continuous**  
ASTM B-505  
AMS 4880  
SAE J461, J462

**Centrifugal**  
ASTM B-271  
AMS 4880  
SAE J461, J462

### Typical Uses

**Aerospace**  
Landing Gear Bushings & Bearings, Valve Guides, Stems, and Seats

**Other Industrial**  
Corrosion Resistant Parts, Wear Rings, Machine Tool Parts, Piston Guides, Worm Wheels, Hot Mill Guides

**Marine**  
Propeller Hubs, Wear Rings, Hardware, Worm Gears, Shafts, Sleeves

### General Notes

Our material is DFARS compliant. Many popular sizes are now available from stock.

### Chemical Composition

	Cu <sup>(1)</sup>	Al	Fe	Mn	Ni <sup>(1)</sup>	Sn	Zn
min/max	78.0 min	9.7-10.9	2.0-3.5	1.5	4.5-5.5	.20	.30
nominal	-	10.3	2.7	-	5.0	-	-

(1) Ni value includes Co.  
Note: Cu + Sum of Named Elements, 99.8% min.



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## Room Temp Tensile & Hardness Data

SECTION SIZE (INCHES)	TENSILE STRENGTH (KSI) MIN	YIELD STRENGTH (KSI) MIN	ELONGATION IN HD MIN	BRINELL (3000 KG)
1" AND UNDER	105	62.5	9%	-
1" AND OVER	95	50	8%	195

## Physical Properties (Based on C95500)

Melting Point - Liquidus . . . . .	1930 F
Melting Point - Solidus . . . . .	1900 F
Density . . . . .	0.272 lb/in <sup>3</sup> at 68 F
Specific Gravity . . . . .	7.53
Electrical Resistivity . . . . .	122.8 ohms-cmil/ft @ 68 F
Electrical Conductivity . . . . .	8.5 %IACS @ 68 F
Thermal Conductivity . . . . .	24.2 Btu · ft/(hr · ft <sup>2</sup> ·°F) at 68F
Coefficient of Thermal Expansion . . . . .	9.0 · 10 <sup>-6</sup> per °F (68-572 F)
Specific Heat Capacity . . . . .	0.1 Btu/lb/°F at 68 F
Modulus of Elasticity in Tension . . . . .	16000 ksi
Magnetic Permeability . . . . .	1.2
Machinability Rating . . . . .	50



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