

AMS 4880-C95510

Standard-stocked product	Continuous cast
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Product description	Nickel-aluminum bronze
Solids	1/2" to 9" O.D.
Tubes	1 1/8" to 13" O.D.
Rectangles	Up to 15"
Standard lengths	24"*
Shape/form	Semi-finished, mill stock or near-net shapes, anode, bar stock, billet/bloom, squares, hex, plate, profile or structural shape, flats/ rectangular bar *Consult mill for other lengths

Typical uses

Industrial

Bearings requiring abrasion resistance/good ductility/retention of hardness at moderate temperatures, bushings, hydraulic seal components, landing gear bushings and bearings

Similar or equivalent specification

CDA	ASTM	SAE	AMS	Federal	Military	Other
C95510		J461 J462	4880			

Chemical composition

Cu (%)	Sn (%)	Zn (%)	Fe (%)	Ni (%) ¹	Al (%)	Mn (%)
78.00 min	0.20	0.30	2.00-3.50	4.50-5.50	9.70-10.90	1.50

Chemical composition according to AMS 4880

¹Ni value includes Co.

Note: Cu + sum of named elements, 99.8% min. Unless otherwise noted, single values represent maximums.

Machinability

Copper alloy UNS no.	Machinability rating	Density (lb/in ³ at 68° F)
C95510	50	0.272

Mechanical properties

Tensile strength, min		Yield strength at 0.2% offset, min		Elongation, in 4D, min	Brinell hardness	Remarks
ksi	MPa	ksi	MPa	%	min to max BHN	
105.0	724	62.5	431	9	192 to 248	Castings <4.0, heat treated
95.0	655	56.0	386	9	192 to 248	Castings 4.0+, heat treated

Mechanical properties according to AMS 4880