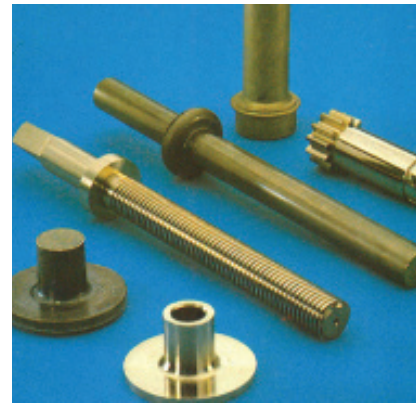


# C67500 MANGANESE BRONZE "A"

OFFERED IN SOLID & HOLLOW BARS



*Basically a high tensile brass, containing tin and manganese. Its principal characteristics are high strength, toughness and excellent resistance to corrosion. It is characterized by excellent forgeability combined with good soldering and brazing properties.*

## TYPICAL USES

### Automotive

Clutch Disks, Shafting, Pump Rods

### Fasteners

Bolts, Studs, Nuts, Pins

### Industrial

Valve Stems, Valve Bodies, Balls, Bushings, Aircraft Parts

### Marine

Hardware, Shafting, Sleeves, Nuts

## SIZES AVAILABLE

**Solid Bar**.....1/4" - 4" diameter in extruded & drawn condition

**Solid Bar**.....4 1/4" - 12" diameter in cast & turned condition

**Hollow Bar**.....in the above O.D. size ranges available upon request

## SIMILAR OR EQUIVALENT SPECS

ASTM B-138

SAE J463

ASTM B-124

SAE J461



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# C67500 MANGANESE BRONZE "A"

Chemical Composition, Mechanical Properties, Physical Properties

## CHEMICAL COMPOSITION

	Cu <sup>(1)</sup>	Al	Fe	Pb	Mn	Sn	Zn
min/max	57.0 - 60.0	.25	0.8 - 2.0	.20	.05 - .50	.50 - 1.5	Rem
nominal	58.5	-	1.4	-	.10	1.0	39.0

## MECHANICAL PROPERTIES

FORM	TEMPER	SECTION SIZE (INCHES)	TENSILE STRENGTH (KSI) MIN	YIELD STRENGTH (KSI) MIN	ELONGATION IN HD MIN	HARDNESS MIN	SHEAR STRENGTH (KSI)
ROD	H01	2	72	42	27%	77	44
	O60	1	65	30	33%	65	42
	H02	1	84	60	19%	90	48
	H01	1	77	45	23%	83	47

## PHYSICAL PROPERTIES

Melting Point - Liquidus °F.....	1630
Melting Point - Solidus °F.....	1590
Density lb/cu in @ 68 °F.....	0.302
Specific Gravity.....	8.36
Electrical Resistivity ohms-cmil/ft @ 68 °F.....	43.2
Electrical Conductivity % IACS @ 68 °F.....	24
Thermal Conductivity Btu/ sq ft/ ft hr/ °F at 68°F.....	61.0
Coefficient of Thermal Expansion 10 <sup>-6</sup> per °F (68-572 °F).....	11.8
Specific Heat Capacity Btu/lb/°F @ 68 °F.....	0.09
Modulus of Elasticity in Tension ksi.....	15000
Modulus of Rigidity ksi.....	5600
Machinability Rating.....	30
Forgeability Rating.....	80

### AVIVA Color Code



GREEN / RED

The values listed on this document represent reasonable approximations suitable for general engineering use. Due to commercial variations in composition and to manufacturing limitations, they should not be used for specification purposes. See applicable A.S.T.M. Specification references.

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[www.avivametals.eu](http://www.avivametals.eu)

USA / Canadian Sales  
(713) 869-9600  
[sales@avivametals.com](mailto:sales@avivametals.com)



European Sales  
+33 494 109 386  
[info@avivametals.com](mailto:info@avivametals.com)



Mexico Sales  
+521 81 1911 2958  
[ventas@avivametals.com](mailto:ventas@avivametals.com)

Other Territories  
[trading@avivametals.com](mailto:trading@avivametals.com)