

Copper C68700

A Copper Zinc Alloy containing Aluminum and small amount of Arsenic which is added as an inhibitor against dezincification. Inhibited Aluminum brass resists the action of high velocity salt and brackish water and is commonly used for condensor tubes. The outstanding characteristics of aluminum brass is the high resistance to impingement attack. Tubes of this alloy are recommended for use in marine and land power stations where cooling water velocities are high and where inhibited admiralty brass has failed from impingement.

TYPICAL APPLICATIONS:

Condenser Tube, Evaporator Tubes, Ferrules, Distiller Tubes, Heat Exchanger Tubes

CHEMICAL COMPOSITION

	Al	As	Cu	Fe	Pb	Zn
Min/Max	1.8 - 2.5	0.02 - 0.06	76.0 - 79.0	0.06	0.07	Rem
Nominals	2.0000	0.0400	77.5000	-	-	20.5000

PHYSICAL PROPERTIES

Coefficient of Thermal Expansion	10.3 • 10 ⁻⁶ per oF (68-572 F)
Density	0.301 lb/in ³ at 68 F
Electrical Conductivity	23 %IACS @ 68 F
Electrical Resistivity	45.1 ohms-cmil/ft @ 68 F
Melting Point – Liquidus	1780 F
Melting Point – Solidus	1710 F
Modulus of Elasticity in Tension	16000 ksi
Modulus of Rigidity	6000 ksi
Specific Gravity	8.33
Specific Heat Capacity	0.09 Btu/lb/oF at 68 F
Thermal Conductivity	58.0 Btu • ft/(hr • ft ² •oF)at 68F

SIZES AVAILABLE :

HOLLOW RODS	Min Bore Size 20 mm and Max OD 100 mm
ROUND RODS/BARS	6mm To 130 mm
HEX	5mm To 60mm
SQUARE	4mm To 60mm
FLAT	5mm Min Thickness and max Width 120mm
PROFILES / SECTIONS	AS per Customer Drawing
BILLETS	Up to 200 mm
INGOTS	AS per Specification