

C69710

SILICON BRASS

DESCRIPTION

C69710 brass is a brass formulated for primary forming into wrought products. It is typically furnished in the H04 (full hard) temper. It has a moderately low melting temperature and a fairly high tensile strength relative to other wrought brasses.

CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	75.00	80.0
Pb	0.50	1.50
Fe	-	0.20
Mn	-	0.40
Si	2.50	3.50
As	0.03	0.06
Total Others	-	0.50
Zn	Remainder	

MECHANICAL PROPERTIES (AS PER TEMPER Ho2)

Range (Inch)	From	To	UTS Min (ksi)	PS Min (Ksi)	Elongation Min (%)	Hardness Min	Hardness Max
Round (Dia)	0.059	1.000	65	32	20	-	-
	1.000	2.953	55	28	25	-	-
Hex (A/F)	0.118	1.000	65	32	20	-	-
	1.000	2.755	55	28	25	-	-
Square (A/F)	0.118	1.000	65	32	20	-	-
	1.000	2.362	55	28	25	-	-

C69710

SILICON BRASS

Range (mm)	From	To	UTS Min (Mpa)	PS Min (Mpa)	Elongation Min (%)	Hardness Min	Hardness Max
Round (Dia)	1.5	25	450	220	20	-	-
	25	75	380	195	25	-	-
Hex (A/F)	3	25	450	220	20	-	-
	25	70	380	195	25	-	-
Square (A/F)	3	25	450	220	20	-	-
	25	60	380	195	25	-	-

PHYSICAL PROPERTIES

Melting Point - Liquidus°F	1706
Density lb/cu in. at 68°F	0.3
Specific Gravity	8.3
Electrical Conductivity % IACS at 68°F	8
Thermal Conductivity Btu/ sq ft/ ft hr/ °F at 68°F	23
Coefficient of Thermal Expansion 68-57210 ⁻⁶ per °F (68 – 572°F)	10.7
Modulus of Elasticity in Tension ksi	16000

FABRICATION PROPERTIES

Technique	Suitability
Capacity for Being Hot Formed	Excellent
Machinability Rating	70

TYPICAL USES

- Industrial