



MARMETAL

C83600 LEADED RED BRASS

ASTM B271 ASTM B505 ASTM B584 QQ-C-390

UNS No.	Copper	Tin	Lead	Zinc	Nickel incl. Cobalt	Iron	Aluminum	Antimony	Sulfur	Phosphorus	Silicon
C83600	84.0-86.0	4.0-6.0	4.0-6.0	4.0-6.0	1.0 max	0.30 max	.005 max	0.25 max	0.08 max	0.05 max	0.005 max

C83600 Leaded Red Brass, also known as SAE 40 and 85-5-5-5 Brass, is the most commonly used Red Brass. CDA C83600 shows good resistance to corrosion, wear and fatigue with moderate strength and good thermal and electrical conductivity. Because of its appearance, corrosion resistance, machinability and high cast yield, C83600 is a common choice for ornamental and architectural applications. C83600 SAE 40 Red Brass is available in centrifugal, continuous and sand cast forms. C83600 Leaded Red Brass is used for heating and cooling equipment, lightning protection, switches, air actuators, printing presses, pump impellers and valve bodies.

Fabrication Properties

Density @ 68° F	0.318 lb/in ³
Melting Range	1570-1850° F
Casting Yield	High
Drossing	Low
Effect on Section Size	High
Fluidity	Medium
Gassing	Medium
Machinability rating (C36000= 100)	84
Brazing	Good
Soldering	Excellent
Gas-shielded arc welding	Not Recommended
Oxy-acetylene welding	Not Recommended
Coated metal-arc elding	Fair

Mechanical Properties

Form	Specification	Tensile, min ksi (MPa)	Yield, max ksi (MPa)	Elongation in 2", % min
Centrifugal Cast	ASTM B271	30 (207)	14 (97)	20
Continuous Cast	ASTM B505	36 (248)	19 (131)	15
Sand Cast	ASTM B584	30 (207)	14 (97)	20

