

C89835 (lead-free C932 replacement)

Bronze Family:	Bismuth Tin Bronze
Type:	Brass, Bronze or Copper Alloy
Solids:	½" to 10" OD
Tubes:	1½" to 9" OD
Rectangles:	Up to 15" wide
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

BENEFITS:

Good machinability, unique Federalloy® technology enables production engineers to tailor any Federalloy® alloy to their own requirements, good polishing and plating characteristics, better castability at lower temperatures which results in lower costs to end users, assures that elongation approximates its leaded alloy counterparts, "no burn-in" feature enables Federalloy® castings to have more definition which results in crisper markings and more legible identification numbers, superior microstructural characteristics, improved finish requires less shot blast which reduces cleaning costs and shortens cycle times

APPLICATIONS:

Faucets, Pump Components, Pipe Fittings, Plumbing Goods, Water Pump Impellers, Housings and Small Gears

Chemical Composition

Cu%	Sn%	Pb%	Zn%	Fe%	Ni%	Sb%	P%	S%	Al%	Mn%	Si%	Bi%
85.00-89.00	6.00-7.50	0.05	2.00-4.00	0.20	1.00	0.35	0.10	0.08	0.005	N/A	0.005	1.75-2.75

Note: Single values represent maximums.

Mechanical Properties

Tensile	Yield	% Elongation in 2"	Hardness
30 ksi min	14 ksi min	6% min	65 typical Bhn (500 kg)

Machinability

Alloy	Machinability Rating	Density (lb/cu in.)
C89835	70	0.321