

# C48600

# NAVAL BRASS

## DESCRIPTION

C48600 naval brass. Mostly used for machine hardware, screw machine products and valve stems, c48600 naval brass is great for hot forging and pressing and machining. With high ductility, naval brass has excellent electrical and thermal conductivity. C48600 naval brass has good creep resistance and high impact strength.

## CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	59.00	62.00
Pb	1.00	2.50
Sn	0.30	1.50
Fe	0.02	0.25
Total Others	-	0.40
Zn	Remainder	

## MECHANICAL PROPERTIES (AS PER TEMPER)

Mechanical property requirement, if any, are to be established by agreement between the manufacturer and the purchaser.

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## PHYSICAL PROPERTIES

Melting Point - Liquidus°F	1645
Melting Point - Solidus°F	1635
Densitylb/cu in. at 68°F	0.304
Specific Gravity	8.42
Electrical Conductivity% IACS at 68°F	25
Coefficient of Thermal Expansion 68-57210 <sup>-6</sup> per °F (68 – 572°F)	13
Modulus of Elasticity in Tensionksi	14600

## FABRICATION PROPERTIES

Technique	Suitability
Soldering	Excellent
Brazing	Good
Oxyacetylene Welding	Not Recommended
Gas Shielded Arc Welding	Not Recommended
Coated Metal Arc Welding	Not Recommended
Spot Weld	Not Recommended
Seam Weld	Not Recommended
Butt Weld	Fair
Capacity for Being Cold Worked	Poor
Capacity for Being Hot Formed	Good
Forgeability Rating	90
Machinability Rating	70

## TYPICAL USES

- › Fasteners
- › Industrial
- › Marine