

AMS 4881

## Additional Information

AMS 4881D has similarities to the following standard designations and specification

CuAl10Fe5Ni5-B / CB333G

EN1982 : 1998-11

## Chemical Properties

Element	Chemical Composition %
Copper (Cu)	74.5 min
Aluminium (Al)	10.5 - 11.5 max
Chromium (Cr)	0.05 max
Cobalt (Co)	0.20 max
Iron (Fe)	4.0 - 5.5 max
Lead (Pb)	0.03 max
Manganese (Mn)	1.5 max
Nickel (Ni)	4.2 - 6.0 max
Silicon (Si)	0.15 max
Tin (Sn)	0.25 max
Zinc (Zn)	0.30 max

## Mechanical Properties

Continuous Cast up to 8"/203mm OD	Condition	Tensile Strength (ksi) Min	Yield Strength (ksi) min	Elongation in 4D min	Hardness
AMS 4881 D Standards	TQ50	125	90	2%	28 HRC

## Physical Properties

Property	Value
Melting Point - Liquidus	1930 °F
Melting Point - Solidus	1900 °F
Density	0.272 lb/in <sup>3</sup> at 68 °F
Specific Gravity	7.53
Electrical resistivity	122.8 Ωs.cmil/ft @ 68 °F
Electrical Conductivity	8.5 % IACS @ 68 °F
Thermal Conductivity	24.2 Btu ft/(hr ft 2°F) at 68 °F
Coefficient of Thermal Expansion	9.0 10 <sup>-6</sup> per °F (58-572 °F)
Specific Heat Capacity	0.1 Btu/lb/°F at 68 °F
Modulus of Elasticity in Tension	16000 ksi
Magnetic Permeability	1.2
Machinability Rating	50

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