

As Sand Cast																		
TQ50	0.0	0	TYP	68	120	68	-	-	10	-	-	-	-	-	230	70	38	15.0
	0.0			20	827	469	-	-	10	-	-	-	-	-	230	483	262	20.0
M01	0.0	0	SMIN	68	90	40	-	-	6	-	-	-	-	-	190	-	-	0.0
	0.0			20	620	275	-	-	6	-	-	-	-	-	190	-	-	0.0
TQ50	0.0	0	SMIN	68	110	60	-	-	5	-	-	-	-	-	200	-	-	0.0
	0.0			20	760	415	-	-	5	-	-	-	-	-	200	-	-	0.0

*Fatigue Strength: 100 x 10 6cycles, unless indicated as [N]X 106.

Physical Properties

<>	US Customary	Metric
Melting Point - Liquidus	1930 F	1054 C
Melting Point - Solidus	1900 F	1038 C
Density	0.272 lb/in ³ at 68 F	7.53 gm/cm ³ @ 20 C
Specific Gravity	7.53	7.53
Electrical Resistivity	122.8 ohms-cmil/ft @ 68 F	20.41 microhm-cm @ 20 C
Electrical Conductivity	8 %IACS @ 68 F	0.049 MegaSiemens/cm @ 20 C
Thermal Conductivity	24.2 Btu · ft/(hr · ft ² ·oF)at 68F	41.9 W/m · oK at 20 C
Coefficient of Thermal Expansion	9.0 ·10 ⁻⁶ per oF (68-572 F)	16.2 ·10 ⁻⁶ per oC (20-300 C)
Specific Heat Capacity	0.1 Btu/lb/oF at 68 F	419.0 J/kg · oK at 293 K
Modulus of Elasticity in Tension	16000 ksi	110000 MPa
Magnetic Permeability*	1.2	1.2
Magnetic Permeability**	1.32	1.32
Poisson's Ratio	0.32	0.32

*TQ 50 Temper, Field Strength 16 kA/m

**As Cast, Field Strength 16 kA/m

Tempers Most Commonly Used No information available.

Typical Uses

Builders Hardware

Window Hardware

Consumer

Piano Keys, Musical Instruments

Electrical

Electrical Hardware

Fasteners

Stuffing Box Nuts

Industrial

Pickling Equipment, Valve Guides, Piston Guides, Valve Seats, Pump Fluid Ends, Glands, Worms, Worms Wheels, Hot Mill Guides, Hand Gun Recoil Mechanisms, Landing Gear Parts, Air Craft Components, Wear Plates, Welding Jaws, Landing Gear Parts, Glass Molds, Machine Parts, Sewage Treatment Applications, Valve Components, Bearings, Bushings, Valve Bodies, Gears

Marine

Marine Applications, Covers for Marine Hardware, Ship Building, Marine Hardware

Ordnance

Government Fittings

The above data used by permission from the **Copper Development Association Inc.** A complete Description of all UNS Copper Alloys is available at www.copper.org