



## MA34B Leaded Brass

---

### Introduction

MA34B is a leaded brass with machinability rating of 90, moderate strength, and capacity for cold work. The alloy is very similar to MA35B / C35300, but optimized to provide better bending performance. Example uses include parts requiring a combination of machining and forming operations, such as crimping, knurling, or thread rolling.

To learn more please contact our [sales department](#).

# MA34B Leaded Brass

Chemical Composition - Limits		Chemical Composition - Nominal	
Cu 62-65 (99.6 min incl named elements)		Cu 63.5	
Pb 1.5-2.5		Pb 2.0	
Zn rem		Zn 34.5	
Fe 0.15 max			
Specifications		Fabrication Index	
ASTM B453		Soldering	5 - Excellent
EN 12164		Hot Worked	2 - Fair
EN 12166		Cold Worked	3 - Good
		Brazing	4 - Very Good
		Machinability	5 - Excellent

## Physical Properties

Annealing Range (Min)	800 °F
Annealing Range (Max)	1100 °F
Density	0.306 lb/in <sup>3</sup>
Electrical Resistivity (Annealed)	39.9 Ω·cir-mil/ft @ 68 °F
Electrical Conductivity (Annealed)	26% IACS @ 68 °F
Thermal Conductivity	67 Btu/ft <sup>2</sup> /ft·hr/°F @ 68 °F
Coefficient of Thermal Expansion	11.3 per °F (68-572 °F)
Modulus of Elasticity (Tension)	15 ksi
Modulus of Rigidity (Tension)	5 ksi
Melting Point (Solidus)	1,700 °F
Melting Point (Liquidus)	1,900 °F

# MA34B Leaded Brass

## Round Wire - Pretempered

TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		YIELD STRENGTH, 0.5% EUL (ksi) Min	MILL LIMITS (inch)	ELONGATION (%) 1" GL
		Min	Max			
Annealed	O60	46.0		16.0	.01 - .2362	20.0
1/4 Hard	H01	52.0	65.0	25.0	.01 - .2362	7.00
1/4 Hard + SR	HR01	52.0	65.0	25.0	.01 - .2362	7.00
1/2 Hard	H02	57.0	80.0	25.0	.01 - .2362	4.00

## Round Rod - Pretempered

TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		YIELD STRENGTH, 0.5% EUL (ksi) Min	MILL LIMITS (inch)	ELONGATION (%) 1" GL
		Min	Max			
Annealed	O60	46.0		16.0	.0625 - .250	20.0
1/4 Hard	H01	52.0	65.0	25.0	.0625 - .250	10.0
1/4 Hard + SR	HR01	52.0	65.0	25.0	.0625 - .250	10.0
1/2 Hard	H02	57.0	80.0	25.0	.0625 - .250	7.00