



FISK MA35B High Leaded Brass UNS C35300 / CuZn37Pb2 / CW606N

MA35B is a high-leaded brass with machinability rating of 90, moderate strength, and capacity for cold work. The alloy is used in applications requiring a combination of machining and forming operations, without annealing. Examples of use include parts with swaged, flared, knurled, or other formed features, including components with crimping requirement.

Fabrication Indices	
Machinability	90
Cold Working	fair
Hot Working	poor
Brazing	good
Soldering	excellent
Welding	poor

Available Forms
Rod and Wire, round
Typical Standards
ASTM B453
ASTM B249, B250
EN 12164, 12166

Chemical Composition
61-62% Copper
1.6-2.5% Lead
0.15% max Iron
Remainder Zinc (36.5% nominal)

Mechanical Properties

○ Round Rod

TEMPER NAME	TEMPER CODE	TENSILE STRENGTH	YIELD STRENGTH	ELONGATION	MILL LIMITS
		min, ksi (MPa)	min, ksi (MPa) @ 0.5% EUL	min, %	
soft anneal	O60	46 (315)	16 (110)	20	0.0394 - 0.3150" (1 - 8 mm)
1/4 hard	H01	52 - 65 (360 - 450)	25 (170)	10	
1/4 hard and Stress Relieved	HR01	52 - 65 (360 - 450)	25 (170)	10	
1/2 hard	H02	57 - 80 (395 - 555)	25 (170)	7	

○ Round Wire

TEMPER NAME	TEMPER CODE	TENSILE STRENGTH	YIELD STRENGTH	ELONGATION	MILL LIMITS
		min, ksi (MPa)	min, ksi (MPa) @ 0.5% EUL	min, %	
soft anneal	O60	46 (315)	16 (110)	20	0.0100 - 0.2362" (0.25 - 6 mm)
1/4 hard	H01	52 - 65 (360 - 450)	25 (170)	7	
1/4 hard and Stress Relieved	HR01	52 - 65 (360 - 450)	25 (170)	7	
1/2 hard	H02	57 - 80 (395 - 555)	25 (170)	4	

Physical Properties

Melting Point (Liquidus)	1670 °F	910 °C
Melting Point (Solidus)	1630 °F	890 °C
Annealing Range (min - max)	800 - 1100 °F	425 - 595 °C
Density	0.306 lb/in ³	8.47 gm/cm ³
Electrical Resistivity (Annealed)	39.9 Ω-cir-mil/ft @ 68 °F	6.62 μΩ-cm @ 20 °C
Electrical Conductivity (Annealed)	26% IACS @ 68 °F	0.151 MS/cm @ 20 °C
Thermal Conductivity	67 Btu/ft ² /ft-hr/°F @ 68 °F	116 W/m-K @ 20 °C
Coefficient of Thermal Expansion	11.3 x 10 ⁻⁶ per °F (68-572 °F)	20.4 x 10 ⁻⁶ per °C (20-300 °C)
Modulus of Elasticity (Tension)	15,000 ksi	103,500 MPa
Modulus of Rigidity	5,600 ksi	38,600 MPa

The information provided on this page is for reference purposes only.

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