

C61400 Aluminum Bronze

Chemical Composition

| | Element | | | | | | |
|--------------------------------------------------------------------|---------------------|------|------|-----|-------|-----|-----|
| | Cu ^(1,2) | Pb | Zn | Fe | P | Al | Mn |
| (1) Cu value includes Ag.(2) Cu + Sum of Named Elements 99.5% min. | | | | | | | |
| Min (%) | | | | 1.5 | | 6.0 | |
| Max (%) | Rem | 0.01 | 0.20 | 3.5 | 0.015 | 8.0 | 1.0 |

Mechanical Properties*

| Form | Temper Code | Tensile Strength (ksi) | YS-0.5% Ext (ksi) | Elongation (%) | Rockwell B scale | Shear Strength (ksi) | Torsion Modulus (ksi) | Izod (ft-lbs) | Fatigue Strength** (ksi) | Ultimate Tensile Strength in Shear (ksi) | Section Size (in) |
|---------------|-------------|------------------------|-------------------|----------------|------------------|----------------------|-----------------------|---------------|--------------------------|------------------------------------------|-------------------|
| Flat Products | H04 | 89 Typ | 60 Typ | 32 Typ | 87 Typ | | | | | | 0.125 |
| | H04 | 85 Typ | 58 Typ | 35 Typ | 86 Typ | | | | | | 0.312 |
| | H04 | 78 Typ | 45 Typ | 40 Typ | 84 Typ | | | | | | 1 |
| | H04 | 80 Typ | 54 Typ | 38 Typ | 85 Typ | | | | | 48 Typ | 0.5 |
| | O60 | 80 Typ | 40 Typ | 40 Typ | | | | | | 42 Typ | 0.315 |
| | O60 | 80 Typ | 40 Typ | 40 Typ | 83 Typ | 42 Typ | | | 26 Typ | | 0.312 |
| | O60 | 82 Typ | 45 Typ | 40 Typ | 84 Typ | 45 Typ | | | 30 Typ | | 0.125 |
| | O60 | 82 Typ | 45 Typ | 40 Typ | | | | | | 45 Typ | 0.118 |
| | O60 | 76 Typ | 33 Typ | 45 Typ | 81 Typ | | | | 28 Typ | 40 Typ | 1 |
| | O60 | 78 Typ | 35 Typ | 42 Typ | | | | | | 40 Typ | 0.59 |
| O60 | 78 Typ | 35 Typ | 42 Typ | 82 Typ | 40 Typ | | | 25 Typ | | 0.5 | |

* Measured at room temperature, 68°F (20°C). ** Fatigue Strength: 100 x 10⁶ cycles, unless indicated as [N] x 10⁶.

