



## CuZn40Pb1Al

Leaded Brass Alloy

Standardization:

Free-Cutting / Leaded Brass Alloy

### ALLOY DESCRIPTION

A highly optimized leaded brass designed specifically for high-speed machining, valve, and armature manufacturing. A true industrial standard for mass production.

### CHEMICAL COMPOSITION (% WEIGHT)

| Fe (%)  | Ni (%)  | Al (%)     | Cu (%)  | Pb (%) | Sn (%)  |
|---------|---------|------------|---------|--------|---------|
| max 0.2 | max 0.2 | 0.05 - 0.3 | 57 - 59 | 1 - 2  | max 0.2 |

### MECHANICAL PROPERTIES (MIN.)

Elongation (A)

20

Hardness (HB)

75

### PHYSICAL PROPERTIES

Density

8.45 [kg/dm<sup>3</sup>]

Melting Temperature

~880 - 900 [°C]

Elk. Conductivity

~13 - 15 [MS/m]

Elasticity Modulus

98 [kN/mm<sup>2</sup>]

### CASTING / MANUFACTURING METHODS

EK Extrusion (Rod/Profile)

GS sand casting

GM Permanent mold casting

GZ Centrifugal casting

### AREAS OF APPLICATION

Free-Cutting Parts

Valves and Fittings

Fasteners and Screws

Plumbing Connections

Precision Watch Parts

### MACHINABILITY & CHARACTERISTICS

The addition of lead ensures short and brittle chip breakage during turning and milling, along with low tool wear. Machinability index is the reference standard for extrusion and hot forging parts.

The technical information specified in this document reflects the standard reference values of international EN and DIN norms. Deviations may be observed depending on final production conditions.

CORUM BRONZE

E-mail : info@corumbronz.com | Web : www.corumbronz.com