Cu-PHCE

Special 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 (%)	Mn (%)	Ni (%)	P (%)	S (%)	Cu (%)	Ace (%)	Pb (%)	Se (%)	Zn (%)	Ag (%)	Sb (%)	Bi (%)
max 0.001	max 0.0005	max 0.001	0.001 - 0.006	max 0.0015	min 99.99	max 0.0005	max 0.0005	max 0.0002	max 0.0001	max 0.0025	max 0.0004	max 0.000

MECHANICAL PROPERTIES (MIN.)

Unspecified	-

PHYSICAL PROPERTIES

Density	**8.45 [kg/dm³]**
Melting Temperature	**~880 - 900 [°C]**
Elk. Conductivity	**~13 - 15 [MS/m]**
Elasticity Modulus	**98 [kN/mm²]**

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

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