



CM203E

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 (%)	C (%)	Si (%)	Mn (%)	Ni (%)	P (%)	Al (%)	Ace (%)	Pb (%)	Se (%)	Zn (%)	Sb (%)	Bi (%)	Sn (%)	Te (%)
9 - 11	max 0.05	max 0.05	max 0.1	max 0.15	max 0.05	max 0.02	max 0.01	max 0.03	max 0.005	max 0.1	max 0.01	max 0.005	max 0.1	max 0.005

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.