CORAM

Material Designation

GB	T2QSn8-0.3
UNS	C52100
EN	CW453K
JIS	C5212

Chemical Composition

Copper, Cu	Rem.
Stannum, Sn	7.50 – 8.50%
Phosphorus, P	0.01 – 0.40%
Iron, Fe	Max. 0.10%
Nickel, Ni	Max. 0.20%
Plumbum, Pb	Max. 0.02%

Physical Properties

Density	8.80 g/cm3
Electrical Conductivity	Min. 13 %IACS
Thermal Conductivity	62.3 W/(m·K)
Melting Point	1027 ℃

Characteristics

CAMK52100 is a copper-tin-phosphorus ternary alloy with high tin content. A small amount of (α+δ) eutectoid will be produced in the α phase solid solution of the alloy structure. The δ phase is a hard and brittle phase, which improves the mechanical properties of the alloy. performance, wear resistance. At the same time, due to the addition of phosphorus element, the corrosion resistance of the alloy is improved.

CAMK52100 has high strength, hardness, high elasticity and wear resistance. High corrosion resistance in atmosphere, fresh water and sea water, easy to weld.

Application

CAMK52100 is mainly used for friction-bearing parts under moderate loads and sliding speeds, but also for elastic elements such as springs and reeds.

Mechanical Properties

Specification mm (up to)	Temper	Tensile Strength Min. MPa	Yield Strength Min. MPa	Elongation Min. A%	Hardness Min. HRB
φ 20-50	Y2	450	280	26	/
φ 50-100	Y2	400	280	26	/
> φ 100	TF00/TB00	Please send an email to ryan@corammaterial.com for more details.			

Advantage

1. We actively respond to any questions from customers and provide shorter delivery times. If customers have urgent needs, we will fully cooperate.

2. We focus on controlling the production process so that the performance of each batch is as consistent as possible and the product quality is excellent.

3. We cooperate with the best domestic freight forwarders to provide customers with sea, rail and air transportation and combined transportation solutions, and have plans for transportation difficulties caused by natural disasters, epidemics, wars and other factors.