BRASS BALLS

Brass balls show fairish mechanical performance, good corrosion resistance, and excellent electrical properties. They generate low frictions. Balls are provided in the passivated condition.

Applications
Special valves, industrial pumps and valves, electronic devices, safety switches, heating units, appliances, furniture rails. They are used in the automotive, electronics and petro-chemical industry.

Chemical composition

Type	%Cu	%Zn	%Pb	%Fe	-	-	-	-	-	-	-
C26000	68.50-71.50	balance	0.070 max	0.050 max	-	-	-	-	-	-	-
C27000	63.00-68.50	balance	0.090 max	0.070 max	-	-	-	-	-	-	-
C28000	59.00-63.00	balance	0.090 max	0.070 max	-	-	-	-	-	-	-

International standards

ITA	USA	GER	FRA	UK	RUS	CHN	JAP
P-CuZn30	C26000	2.0265	CuZn30	CZ106	L70	H70	C2600
P-CuZn35	C27000	2.0335	CuZn36	CZ107	L63	H65	C2700
P-CuZn40	C28000	2.0360	CuZn40	CZ109	L60	H62	C2800

Physical / mechanical / thermal / electric / magnetic properties

Property	Symbol	U.o.M.	Type	Notes	Values
Density	δ	[g/cm3]	Physical	Room temp.	8.49
Young's modulus	E	[GPa]	Mechanical	-	110
Specific heat	c	[J/kg-K]	Thermal	Room temp.	375
Coefficient of linear thermal expansion	α	10^-6/ºC]	Thermal	(ΔT=0-100°C)	20.4
Thermal conductivity	λ	[W/(m·K)]	Thermal	Room temp.	118.0
Electric resistivity	ρ	[Ω*m*10^-9]	Electric	-	63
Relative magnetic permeability	μ	-	Magnetic	Paramagnetic	1.05

Technical data

Property	Type	U.o.M.	Values	U.o.M.	Values
Hardness	Mechanical	[HRB]	75 - 87	-	-
Ultimate tensile strength	Mechanical	[MPa]	500 - 600	[psix10^3]	72 - 87
Service temperature	Thermal	[ºC]	-196 / 500	[ºF]	-320.8 / 932

Range

Diameters (min/max)	U.o.M.	Diameters (min/max)	U.o.M.	Precision Grade (ISO 3290)
0.400 - 180.000	[mm]	1/64 - 7	[']	G40-60-100-200-500-1000-2000

Corrosion Resistance
Good corrosion resistance in drinking-water, brackish water, sea-water (except at high flow rate), salt atmospheres, petroleum products, alcohols. Fairish resistance with respect to acids and alkali. It does not resist in contact with hydroxides, cyanides, oxidizing acids. As a general rule, corrosion resistance decreases as zinc content increases.