Protolis

Zamak Grades for CNC Machining

Materials	Other names	Type	Descriptions	Applications	Corrosion resistance	Post treatment capability	Welding capability	Price index	Density - g/cm3	Young modulus - Gpa	Yield strength - Mpa	Ultimate tensile strength - Mpa	Elongation at break - %	Hardness - HB brinell	Electrical Conductivity - % at 20 °C IACS	Electrical resistivity - Ω·mm2/m	Thermal conductivity - W/m-K
Zamak 3	AG40An, ZP3, ZL3, ZnAl4	Zamak	Zamak alloy are mainly composed of zinc, aluminum and magnesium. This grade have 4% aluminium. Zamak 3 is the most widely used zinc alloy. It provides excellent combination of physcial and mechanical properties with a good dimensional stability.	Automotive Construction: plumbing Electrical	Good	Excellent for plating, painting and chromate treatments	Poor	4	6.6	85-90	208 - 221	280	10 - 11	83	27	0,0637	110 - 113
Zamak 5	AC41A, ZP5, ZL5, ZnAl4Cu1	Zamak	This alloy is similar to Zamak 3 with some additionnal copper which results in improved mechanical properties but slightly reduces ductility.	Automotive Construction: plumbing Electrical	Good	Excellent for plating, painting and chromate treatments	Poor	4	6.6	85-90	221 - 269	316	7	86	26 - 27	0,0638	108 - 113