ROLEC Gehäuse Systeme GmbH

Alloying constituents and characteristics of zinc diecast
GD-Zn Al 4 Cu 1 (DIN EN 12844)

Diecast material

Material	Alloying constituents in weight percent (%)	Maximum admissible additional constituent in weight percent (%)
GD-Zn Al 4 Cu 1 DIN 1743 (Z410)	Al 3.5-4.3 / Cu 0.4-1.1 / Mg 0.02-0.06	Fe 0.05 / Ni 0.02 / Pb + Cd 0.09 / Sn 0.002

Mechanical characteristics

Characteristics	Tensile strength R_m	Offset yield stress $R_{p0.2}$	Brinell hardness HB	Breaking elongation
Units	N / mm^2	N / mm^2	kg / mm^2	%
GD-Zn Al 4 Cu 1	280 – 350	220-250	85-105	2.0-5-0

Physical characteristics

Characteristics	Density	Modulus of elasticity E	Moulding shrinkage	Thermal conductivity at 20 °C	Electric conductivity at 20 °C	Coefficient of thermal expansion at 20-100 °C
Units	g/cm^3	N / mm^2	%	$\frac{W}{°K*cm}$	$\frac{m}{O*mm^2}$	°K^{-1}
GD-Zn Al 4 Cu 1	6.7	85000	0.6-1.1	0.92-1.05	15-16	27 * 10^{-6}