

Materials characteristic

Remag 32 I

Type: Isostatically pressed

Magnetic properties:

Characteristic	Designation	Unit	Typical	Minimum
Remanence	Br	T	1.17	1.15
Coercivity	bHc	kA/m	840	800
Intrinsic Coercivity	iHc	kA/m	1900	1750
Energy product	(BH) _{max}	kJ/m ³	260	240

The magnetic properties may vary depending on shape and size of the magnet. Given values relate to dimension ratio $h/D = 1$.

Physical properties:

Characteristic	Unit	Value
Density	g/cm ³	8.4
Elasticity Modulus	kN/mm ²	120
Bending Strength	N/mm ²	120
Compression Strength	N/mm ²	800
Hardness	HV	600
Specific Electrical Resistance	μΩcm	85
Specific Heat	J/kgK	280
Specific Thermal Conductivity	W/mK	12
Curie Temperature	°C	800
Temperature Coefficient ; -TK _{Br}	%/°C	-0.04
Temperature Coefficient; -TK _{iHc}	%/°C	-0.26
Required Magnetisation Strength	kA/m	3500
Max. Working Temperature	°C	250

Chemical composition: (acc. DIN IEC 60404-8-1)

Element	Nominal (wt.%)
Sm	24 - 26
Co	48 - 52
Fe	13 - 18
Cu	1.5 - 12
Zr	0 - 3

