



MATERIAL DATA

Magnetic values according to DIN IEC 60404-8-1

Energy product (B·H) _{max.}	typ.	kJ/m ³	167
	min.	kJ/m ³	160
Remanence B _r	typ.	mT	940
	min.	mT	920
Revers. temp.-coeff. of B _r	approx.	%/K	-0.045 ¹⁾
Coercivity H _c	H _{cB} typ.	kA/m	730
	H _{cB} min.	kA/m	710
	H _{cJ} typ.	kA/m	1600
	H _{cJ} min.	kA/m	1433
Revers. temp.-coeff. of H _{cJ}	approx.	%/K	-0.28 ¹⁾
Relative permanent permeability μ _{rec.}	approx.		1.05
Curie temperature	approx.	°C	720
Max. operating temperature	approx.	°C	250 ²⁾
Magnetising field strength	min.	kA/m	>3500

Mechanical values

Density	approx.	g/cm ³	8.3
Vickers hardness	approx.	HV	500-700
Elasticity modulus	approx.	10 ³ N/mm ²	100-200
Compressive strength	approx.	N/mm ²	1000
Flexural strength	approx.	N/mm ²	100-180
Expansion coefficient	p.p.d. ³⁾	approx. 10 ⁻⁶ /K	12
	i.p.d. ⁴⁾		6
Spec. elec. resistance	approx.	10 ⁻⁶ Ωm	0.5
Spec. heat capacity	approx.	J/(kg·K)	370
Thermal conductivity	approx.	W/mK	12

¹⁾ In the temperature range from 20 °C to 100 °C.
²⁾ The max. operating temperature depends on the magnet dimension and the specific application. Please contact our application engineering for more information.
³⁾ p.p.d. = perpendicular to preferred direction
⁴⁾ i.p.d. = in preferred direction

All values indicated were determined on standard samples according to IEC 60404-5. Matrix pressed magnets of various shapes and sizes may differ in their magnetic ratings.