



MATERIAL DATA

Magnetic values according to DIN IEC 60404-8-1

			20 °C	150 °C
Energy product (B·H) _{max.}	typ.	kJ/m ³	230	180
	min.	kJ/m ³	200	150
Remanence B _r	typ.	mT	1110	970
	min.	mT	1050	940
Revers. temp.-coeff. of B _r	approx.	%/K	-0.08 ¹⁾	
Coercivity H _c	H _{cB} typ.	kA/m	850	740
	H _{cB} min.	kA/m	790	680
	H _{cJ} typ.	kA/m	2500	1000
	H _{cJ} min.	kA/m	2200	800
Revers. temp.-coeff. of H _{cJ}	approx.	%/K	-0.5 ¹⁾	
Relative permanent permeability μ _{rec.}	approx.		1.1	
Curie temperature	approx.	°C	350	
Max. operating temperature	approx.	°C	190 ²⁾	
Magnetising field strength	min.	kA/m	>2000	

Mechanical values

			20 °C
Density	approx.	g/cm ³	7.6
Vickers hardness	approx.	HV	560-580
Elasticity modulus	approx.	10 ⁹ N/mm ²	150
Compressive strength	approx.	N/mm ²	1000
Flexural strength	approx.	N/mm ²	250
Expansion coefficient	p.p.d. ³⁾	approx. 10 ⁻⁶ /K	-1
	i.p.d. ⁴⁾		5
Spec. elec. resistance	approx.	10 ⁻⁶ Ωm	1.6
Spec. heat capacity	approx.	J/(kg·K)	440
Thermal conductivity	approx.	W/mK	8

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
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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.