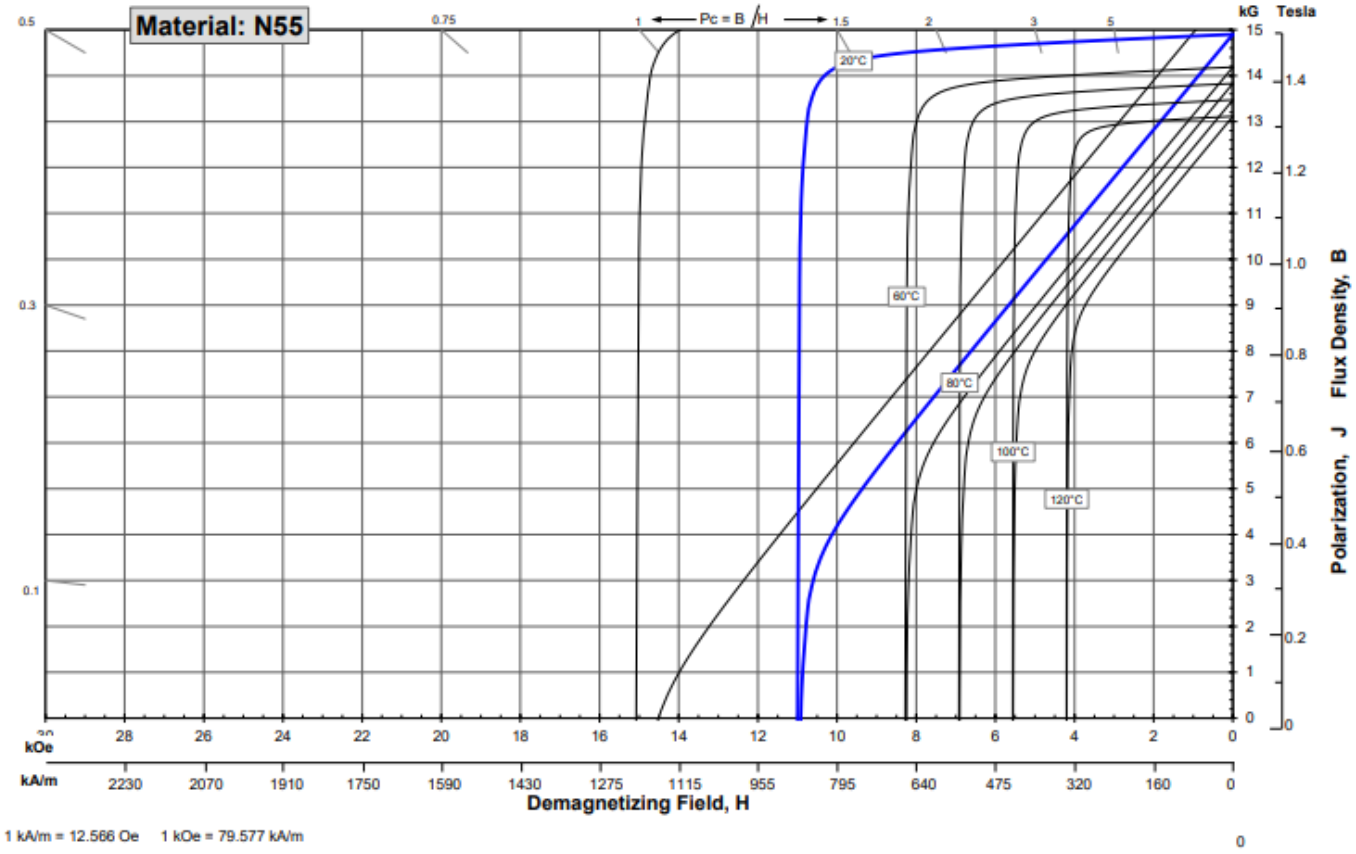
Issue date: 15-10-2025

Technical Datasheet: Neodymium N55 – Anisotropic Sintered

Demagnetisaton Curve N55



The material data and demagnetization curves shown above represent typical properties that may vary due to product shape and size. Demagnetisation curves show nominal Br and minimum Hci. On request, actual measurements of demagnetisation curves can be obtained. For that, contact us on the address below.

Magnetic Properties @20°C			
B_r	min	1460	mT
H_{cB}	min	716	kA/m
H_{cJ}	min	876	kA/m
$(BH)_{ma}$	min	414	kJ/m^3
$\alpha(B_r)$	min typ	-0.12	%/°C
$\beta(H_{cJ})$	min typ	-0.62	%/°C
T_{max}		80	°C

Physical & Mechanical Properties @20°C			
Density	typ	7400 - 7800	kg/m^3
Vickers Hardness	typ	500 - 700	HV
Modulus of Elasticity / Young's modulus	typ	140 - 200	GPa
Flexural / bending strength	typ	100 - 400	MPa
Compressive strength	typ	600 - 1100	MPa
Tensile strength / ultimate strength	typ	74 - 90	MPa
Electrical resistivity	typ	1.1 - 1.7	µΩm
Specific heat capacity	typ	350 - 550	J/(kg K)
Thermal conductivity	typ	5 - 15	W/(m K)
Coefficient of linear thermal expansion, || DOM*	typ	3 - 9	10^{-6}/K
Coefficient of linear thermal expansion, ⊥ DOM*	typ	-3 - 0	10^{-6}/K

* DOM = Direction Of Magnetisation