

Neocomp I 42 PA-1

Product description

Magnetic material: Isotropic NdFeB

Bonding material: PA12

Magnetic properties

	Unit	min	typ
Residual induction; B_r	mT	510	561.2
Coercive force; b_{Hc}	kA/m	310	367
Intrinsic coercive force; i_{Hc}	kA/m	620	680.2
Energy product; BH_{max}	kJ/m ³	40	52
Temperature coefficient; TK_{Br}^{**}	%/°C		-0,13
Temperature coefficient; TK_{iHc}^{**}	%/°C		-0,40
Magnetising field strength; M	kA/m		2000

Values shown in the table are typical and vary depending upon part geometry.

Other relevant properties

	Unit	Value
Density; ρ	g/cm ³	4.98
Operating temperature; $T_{op}^{*/***}$	°C	120
Flexural strength; σ_{fM}	MPa	63.9
Glass transition; T_g	°C	40
Melting temperature; T_m	°C	180

* Max operating temperature depends on the magnet dimensions, the exposure time and the specific application. Please get in touch with our applications engineers for any further info.

** In the temperature range from 20 °C to 100 °C.

*** For magnets with PPS as binder, the chemical resistance to oils, grease, motor oils etc. is significantly better than for PA-bonded magnets; however this has to be checked in individual cases.