

Neocomp I 42 PS

Product description

Magnetic material: Isotropic NdFeB
 Bonding material: PPS

Magnetic properties

	Unit	min	typ
Residual induction; Br	mT	490	488.9
Coercive force; bHc	kA/m	300	343.2
Intrinsic coercive force; iHc	kA/m	820	977.6
Energy product; BH _{max}	kJ/m ³	40	41.3
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	4.91
Operating temperature; T _{op} * / ***	°C	150
Tensile strength; R _m	MPa	31.2
Flexural strength; σ _{fM}	MPa	69.5
Elongation at break; ε	%	0.124
Young's modulus; E	GPa	25.1
Glass transition; T _g	°C	80
Melting temperature; T _m	°C	280

* 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.