

Neocomp I 43 PX

Product description

Magnetic material: Isotropic NdFeB

Bonding material: PA612

Magnetic properties

| | Unit | min | typ |
|--|-----------------|-----|-------|
| Residual induction; B_r | mT | 505 | 552.8 |
| Coercive force; b_{Hc} | kA/m | 320 | 357.9 |
| Intrinsic coercive force; i_{Hc} | kA/m | 680 | 720.4 |
| Energy product; BH_{max} | kJ/m^3 | 42 | 49 |
| Temperature coefficient; TK_{Br}^{**} | %/°C | | -0,12 |
| Temperature coefficient; TK_{iHc}^{**} | %/°C | | -0,35 |
| 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 | 150 |
| Tensile strength; R_m | MPa | 39.4 |
| Flexural strength; σ_{fM} | MPa | 73 |
| Elongation at break; ϵ | % | 0.261 |
| Young's modulus; E | GPa | 19.9 |
| Glass transition; T_g | °C | 50 |
| Melting temperature; T_m | °C | 210 |

* 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.