

# Neocomp I 51/65 PS

## Product description

Magnetic material: Isotropic NdFeB

Bonding material: PPS

## Magnetic properties

|  | Unit                  | min | typ   |
|--|-----------------------|-----|-------|
| Residual induction; $B_r$                | mT                    | 550 | 576.7 |
| Coercive force; $b_{Hc}$                 | kA/m                  | 330 | 363.6 |
| Intrinsic coercive force; $i_{Hc}$       | kA/m                  | 650 | 683.4 |
| Energy product; $BH_{max}$               | $\text{kJ/m}^3$       | 49  | 53.1  |
| Temperature coefficient; $TK_{Br}^{**}$  | $\%/^{\circ}\text{C}$ |     | -0,11 |
| Temperature coefficient; $TK_{iHc}^{**}$ | $\%/^{\circ}\text{C}$ |     | -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; $\rho$                         | $\text{g/cm}^3$    | 5.14  |
| Operating temperature; $T_{op}^{*/***}$ | $^{\circ}\text{C}$ | 150   |
| Flexural strength; $\sigma_{fM}$        | MPa                | 62.9  |
| Glass transition; $T_g$                 | $^{\circ}\text{C}$ | 80    |
| Melting temperature; $T_m$              | $^{\circ}\text{C}$ | 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  $^{\circ}\text{C}$  to 100  $^{\circ}\text{C}$ .

\*\*\* 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.