



**MATERIAL DATA**

Magnetic values according to DIN IEC 60404-8-1

Energy product (B·H) <sub>max.</sub>	typ.	kJ/m <sup>3</sup>	46
	min.	kJ/m <sup>3</sup>	43
Remanence B <sub>r</sub>	typ.	mT	515
	min.	mT	505
Revers. temp. coeff. of B <sub>r</sub>	approx.	%/K	-0.13 <sup>2)</sup>
Coercivity H <sub>C</sub>	H <sub>cB</sub> typ.	kA/m	355
	H <sub>cB</sub> min.	kA/m	340
	H <sub>cJ</sub> typ.	kA/m	900
	H <sub>cJ</sub> min.	kA/m	800
Revers. temp. coeff. of H <sub>cJ</sub>	approx.	%/K	-0.4 <sup>2)</sup>
Relative permanent permeability μ <sub>rec.</sub>	approx.		1.15
Curie temperature	approx.	°C	305
Magnetising field strength	min.	kA/m	2800

Operating temperature

Matrix binder PA 12	max.	°C	140 <sup>1)</sup>
Matrix binder PPS <sup>3) 4)</sup>	max.	°C	180 <sup>1)</sup>

Mechanical values

Density	approx.	g/cm <sup>3</sup>	5.0
---------	---------	-------------------	-----

<sup>1)</sup> The max. operation temperature depends on the exposure time, the magnet dimensions as well as the specific application. With PA high temperatures have an extra negative impact on the mechanical characteristics with increasing duration of exposure. Please get in touch with our applications engineers for any further info.

<sup>2)</sup> In the temperature range from 20 °C to 100 °C.

<sup>3)</sup> 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.

<sup>4)</sup> On request.

All values indicated were determined on a sample (10 mm x 10 mm x 5 mm) according to IEC 60404-5.

For unfavourable geometries, especially for thin magnets, the excessively fast solidification process can cause the material data to be less than optimal.