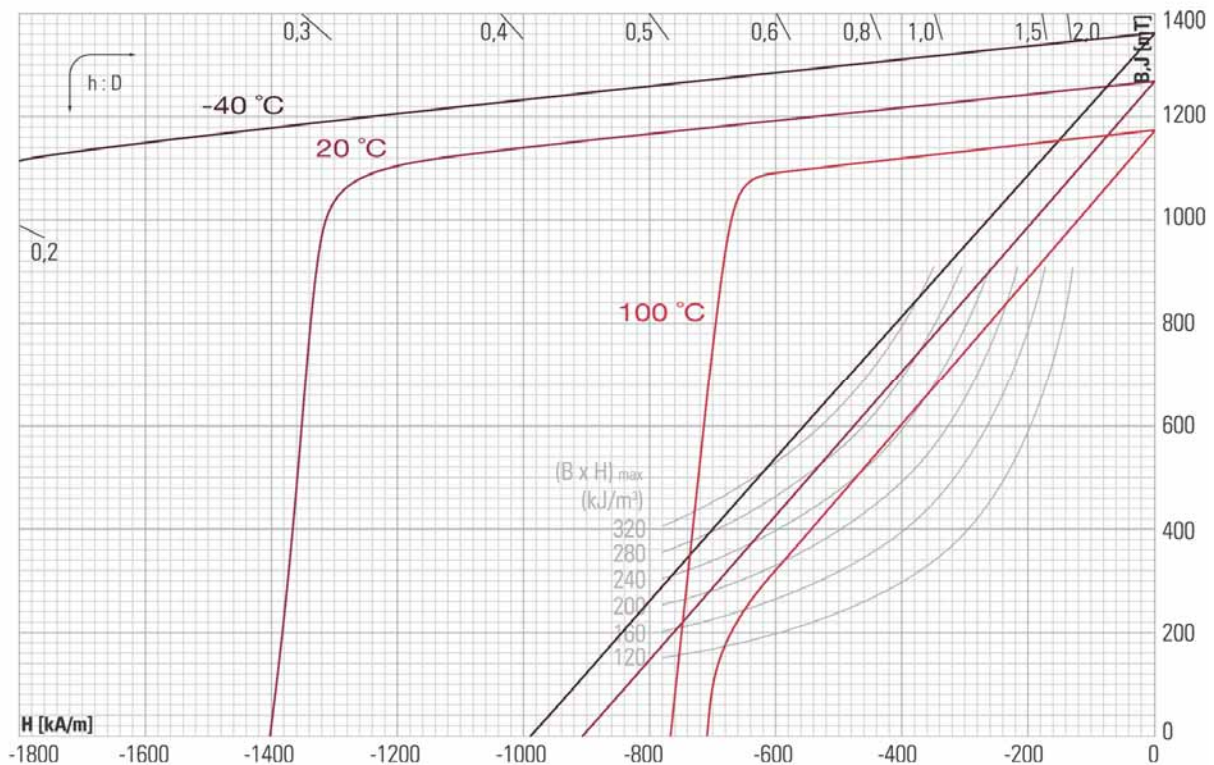


RARE EARTH MAGNETS  
**NdFeB\* 270/125 h**  
 anisotropic



**MATERIAL DATA**

Magnetic values according to DIN IEC 60404-8-1

|  |                      |                   | 20 °C               | 100 °C |
|--|----------------------|-------------------|---------------------|--------|
| Energy product<br>(B·H) <sub>max.</sub>              | typ.                 | kJ/m <sup>3</sup> | 300                 | 230    |
|  | min.                 | kJ/m <sup>3</sup> | 270                 | 200    |
| Remanence<br>B <sub>r</sub>                          | typ.                 | mT                | 1280                | 1150   |
|  | min.                 | mT                | 1220                | 1110   |
| Revers. temp.-<br>coeff. of B <sub>r</sub>           | approx.              | %/K               | -0.10 <sup>1)</sup> |        |
| Coercivity H <sub>c</sub>                            | H <sub>cb</sub> typ. | kA/m              | 920                 | 700    |
|  | H <sub>cb</sub> min. | kA/m              | 870                 | 600    |
|  | H <sub>cd</sub> typ. | kA/m              | 1400                | 780    |
|  | H <sub>cd</sub> min. | kA/m              | 1250                | 680    |
| Revers. temp.-<br>coeff. of H <sub>cd</sub>          | approx.              | %/K               | -0.6 <sup>1)</sup>  |        |
| Relative permanent<br>permeability μ <sub>rec.</sub> | approx.              |                   | 1.1                 |        |
| Curie<br>temperature                                 | approx.              | °C                | 330                 |        |
| Max. operating<br>temperature                        | approx.              | °C                | 130 <sup>2)</sup>   |        |
| Magnetising field<br>strength                        | min.                 | kA/m              | >2400               |        |

**Mechanical values**

|                           |                      |                                   | 20 °C   |
|---------------------------|----------------------|-----------------------------------|---------|
| Density                   | approx.              | g/cm <sup>3</sup>                 | 7.5     |
| Vickers hardness          | approx.              | HV                                | 560-580 |
| Elasticity modulus        | approx.              | 10 <sup>9</sup> N/mm <sup>2</sup> | 150     |
| Compressive<br>strength   | approx.              | N/mm <sup>2</sup>                 | 1000    |
| Flexural strength         | approx.              | N/mm <sup>2</sup>                 | 250     |
| Expansion coefficient     | p.p.d. <sup>3)</sup> | approx.<br>10 <sup>-6</sup> /K    | -1      |
|                           | i.p.d. <sup>4)</sup> |                                   | 5       |
| Spec. elec.<br>resistance | approx.              | 10 <sup>-6</sup> Ωm               | 1.6     |
| Spec. heat capacity       | approx.              | J/(kg·K)                          | 440     |
| Thermal conductivity      | approx.              | W/mK                              | 8       |

- <sup>1)</sup> In the temperature range from 20 °C to 100 °C.  
<sup>2)</sup> The max. operating temperature depends on the magnet dimension and the specific application. Please contact our application engineering for more information.  
<sup>3)</sup> p.p.d. = perpendicular to preferred direction  
<sup>4)</sup> i.p.d. = in preferred direction  
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All values indicated were determined on standard samples according to IEC 60404-5.  
 Matrix pressed magnets of various shapes and sizes may differ in their magnetic ratings.