# Technical Data Sheet

## Material: Neodymium Iron Boron Magnet

**Grade:** N4021

### Material Properties

**Grade** | **Press** | **Density** | **Bending Strength** | **Compressive Strength** | **Electrical Resistivity (Ωm)** | **Temperature Coefficients (%/°C)** | **Curie Temperature** |
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N4021 | D | 7.6 x 10³ | 0.275 | 2.95 x 10⁴ | 4.2 x 10⁴ | 9.6 x 10³ | 1.3 x 10⁵ | 1.4 x 10⁻⁶ | 7.1 x 10⁻⁶ | -2.1 x 10⁻⁶ |

³// M Parallel to magnetic orientation, ┴M Perpendicular to magnetic orientation.

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**Press:**

- **Die-Pressed (D)**
- **Isostatically-Pressed (I)**

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**Permeance Coefficient**

- 20 °C
- 50 °C
- 80 °C
- 110 °C
- 140 °C

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**Neodymium Iron Boron / Magnetic Properties**

| Grade | Press | Br (Gauss) | Hc (Oersteds) | Hci (Oersteds) | BHmax (MGOe) | Temperature Coefficients (%/°C) | Maximum Operating Temp @ Pc=2 (°C) |
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N4021 | D | 12,300 ~ 12,900 | 1,600 | 21,000 | 36 ~ 40 | -0.10 | -0.55 | ~ 160 | ~ 320 |

¹ D: Die-Pressed, I: Isostatically-Pressed

² The Maximum Operating Temperature shown here is for magnets operating at a Permeance Coefficient of 2. At the temperatures shown the operating point of the material is above the knee of the BH Curve.