

Main Physical & Mechanical Properties of Compression Bonded NdFeB Magnet

| Material Grade | | BNC-4 | BNC-6 | BNC-8L | BNC-8 | BNC-8SR | BNC-8A | BNC-8H | BNC-9 | BNC-9H | BNC-10 | BNC-11 | BNC-11L | BNC-12 | BNC-12L |
|-------------------------------|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Flexural Strength | MPa | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 |
| Bending Elastic Modulus | MPa | 10800.0 | 10800.0 | 10800.0 | 10800.0 | 10800.0 | 10800.0 | 10800.0 | 10800.0 | 10800.0 | 10800.0 | 10800.0 | 10800.0 | 10800.0 | 10800.0 |
| Thermal Expansion Coefficient | 10 ⁻⁶ /°C | 7--10 | 7--10 | 7--10 | 7--10 | 7--10 | 7--10 | 7--10 | 7--10 | 7--10 | 7--10 | 7--10 | 7--10 | 7--10 | 7--10 |
| Hardness | Shore D | 54--60 | 54--60 | 48--51 | 48--51 | 48--51 | 48--51 | 48--51 | 48--51 | 48--51 | 48--51 | 48--51 | 48--51 | 48--51 | 48--51 |
| Density | g/cm ³ | 5.3-5.7 | 5.5-6.0 | 5.6-6.1 | 5.8-6.1 | 5.8-6.1 | 5.8-6.2 | 5.9-6.2 | 5.9-6.2 | 5.8-6.1 | 5.8-6.2 | 5.8-6.1 | 5.8-6.1 | 6.0-6.3 | 6.0-6.3 |
| Electric Resistivity | μΩ. cm | 31--56 | 31--56 | 31--56 | 31--56 | 31--56 | 31--56 | 31--56 | 31--56 | 31--56 | 31--56 | 31--56 | 31--56 | 31--56 | 31--56 |
| Recoil Permeability | | 1.2 | 1.2 | 1.2 | 1.2 | 1.13 | 1.13 | 1.13 | 1.2 | 1.13 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |