totalElement

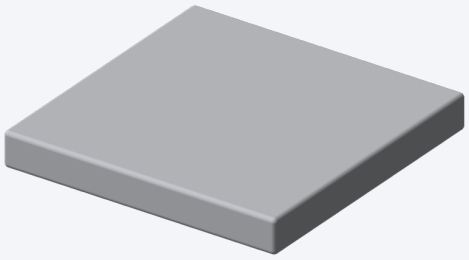
SPECIFICATION SHEET
Part no. B12X12X116N52-3M

# Block Magnet

## 1/2 x 1/2 x 1/16 Inch (12.70 x 12.70 x 1.59 mm)

Width x Length x Thickness

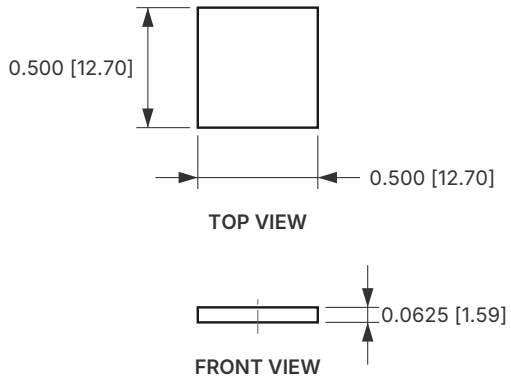
ISOMETRIC VIEW — Not to scale



SPECIFICATIONS

| | |
|---|---|
| WIDTH | 0.500 Inch [12.70 mm] |
| LENGTH | 0.500 Inch [12.70 mm] |
| THICKNESS | 0.0625 Inch [1.59 mm] |
| TOLERANCE | ±0.004 Inch [±0.10 mm] |
| MATERIAL | Sintered Neodymium (NdFeB) |
| GRADE | N52 |
| COATING | Nickel-Copper-Nickel (Ni-Cu-Ni) |
| ADHESIVE | 3M VHB 4920 |
| MAGNETIZATION | Through the thickness |
| PULL FORCE | 4.55 lbs (2.1 kg) |
| SURFACE FIELD | 1,625 Gauss (162 mT) |
| WEIGHT (EACH) | 2 g (0.071 oz) |

DIMENSIONS Inch [mm] · not to scale




MAGNETIZATION




Magnetized through the 0.0625 [1.59] dimension. Pole faces shown for illustration.

GRADE PROPERTIES · N52

| PROPERTY | SI | CGS / IMPERIAL |
|---|---|---|
| Remanence (Br) | 1.43–1.48 T | 14.3–14.8 kG |
| Coercivity (Hcb) | ≥ 836 kA/m | ≥ 10.5 kOe |
| Intrinsic coercivity (Hcj) | ≥ 876 kA/m | ≥ 11 kOe |
| Max. energy product (BH)max | 398–422 kJ/m³ | 50–53 MGOe |
| Max. operating temperature | 80 °C | 176 °F |

Typical values for sintered NdFeB of grade N52 at room temperature, not measured on this part. The highest safe working temperature also depends on the magnet's shape and how it's used.

Handling: neodymium magnets are brittle and can chip, or pinch skin, if they snap together. Keep them away from pacemakers and magnetic media.

VIEW ONLINE

Scan to open this magnet on totalElement.com.

CAD FILES

The technical drawing and 3D model are on the product page.

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