

# Specifications

|                     |                                 |           |                 |       |           |      |
|---------------------|---------------------------------|-----------|-----------------|-------|-----------|------|
| Product Name        | Neodymium Φ10mmx40mm            |           |                 |       |           |      |
| Product Code        | ND0316                          |           |                 |       |           |      |
| Content             | Name                            | Symbol    | SI              |       | CGS       |      |
| Shape               | Diameter                        | D         | 10              | mm    | 1         | cm   |
|                     | Height                          | H         | 40              | mm    | 4         | cm   |
|                     | Dimensional tolerance<br>+／－    | D         | 0.1             | mm    | 0.01      | cm   |
|                     |                                 | H         | 0.1             | mm    | 0.01      | cm   |
|                     | Magnetization direction         | M         | Axial direction |       |           |      |
|                     | Surface treatment               | NiCuNi    | 12              | μm    | -         |      |
| Magnetic Properties | Surface flux density            | B         | 544.9           | mT    | 5449      | G    |
|                     | Attractive and Adsorptive Force | F         | 4.24            | kgf   | 4249      | gf   |
|                     | Operating Point Flux Density    | Bd        | 1144.9          | mT    | 11449     | G    |
|                     | Total Flux                      | φ o       | 0.00008992      | Wb    | 8992      | Mx   |
|                     | Permeance Coefficient           | Pc        | 24.01           | Pc    | -         |      |
|                     | Operating Temperature Limit     | Tw        | 150             | ℃     | 302       | ℉    |
| Material Properties | Material Symbol                 | Neodymium | 35              |       |           |      |
|                     | Residual Flux Density           | Br        | 1170-1220       | mT    | 11.7-12.2 | kG   |
|                     | Coercive Force                  | Hcb       | ≥868            | kA/m  | ≥10.9     | kOe  |
|                     | Intrinsic coercive force        | Hcj       | ≥955            | kA/m  | ≥12       | kOe  |
|                     | Maximum energy product          | BH        | 263-287         | kJ/m3 | 33-36     | MGOe |
|                     | Temperature coefficient         | Br        | -0.12           | %/℃   | 31.78     | %/℃  |
|                     |                                 | Hcj       | -0.55           | %/℃   | 31.01     | %/℃  |
|                     | Heat resistance temperature     | Tw        | ≤80             | ℃     | ≤176      | ℉    |
|                     | Curie temperature               | Tc        | 310             | ℃     | 590       | ℉    |
|                     | Density                         | ρ         | 7.5             | kg/m3 | -         |      |
| Weight              | Net                             | 0.0235    | kg              | 23.5  | g         |      |
| Remarks             | REACH RoHS Directive            |           |                 |       |           |      |

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