

## Magnetic Properties of Sintered NdFeB Magnets



| Grade | Remanence (Br) |           | Coercivity Force (Hcb) |       | Intrinsic Coercive Force (Hci) |     | Max. Energy Product (BHmax) |       | Maximum Operating Temp. |
|-------|----------------|-----------|------------------------|-------|--------------------------------|-----|-----------------------------|-------|-------------------------|
|       | mT             | kGs       | kA/m                   | kOe   | kA/m                           | kOe | kJ/m <sup>3</sup>           | MG0e  |                         |
| N35   | 1170-1220      | 11.7-12.2 | ≥868                   | ≥10.9 | ≥955                           | ≥12 | 263-287                     | 33-36 | 80 °C                   |
| N38   | 1220-1250      | 12.2-12.5 | ≥899                   | ≥11.3 | ≥955                           | ≥12 | 287-310                     | 36-39 | 80 °C                   |
| N40   | 1250-1280      | 12.5-12.8 | ≥907                   | ≥11.4 | ≥955                           | ≥12 | 302-326                     | 38-41 | 80 °C                   |
| N42   | 1280-1320      | 12.8-13.2 | ≥915                   | ≥11.5 | ≥955                           | ≥12 | 318-342                     | 40-43 | 80 °C                   |
| N45   | 1320-1380      | 13.2-13.8 | ≥923                   | ≥11.6 | ≥955                           | ≥12 | 342-366                     | 43-46 | 80 °C                   |
| N48   | 1380-1420      | 13.8-14.2 | ≥923                   | ≥11.6 | ≥876                           | ≥12 | 366-390                     | 46-49 | 80 °C                   |
| N50   | 1400-1450      | 14.0-14.5 | ≥796                   | ≥10.0 | ≥876                           | ≥11 | 382-406                     | 48-51 | 60 °C                   |
| N52   | 1430-1480      | 14.3-14.8 | ≥796                   | ≥10.0 | ≥876                           | ≥11 | 398-422                     | 50-53 | 60 °C                   |
| 35M   | 1170-1220      | 11.7-12.2 | ≥868                   | ≥10.9 | ≥1114                          | ≥14 | 263-287                     | 33-36 | 100 °C                  |
| 38M   | 1220-1250      | 12.2-12.5 | ≥899                   | ≥11.3 | ≥1114                          | ≥14 | 287-310                     | 36-39 | 100 °C                  |
| 40M   | 1250-1280      | 12.5-12.8 | ≥923                   | ≥11.6 | ≥1114                          | ≥14 | 302-326                     | 38-41 | 100 °C                  |
| 42M   | 1280-1320      | 12.8-13.2 | ≥955                   | ≥12.0 | ≥1114                          | ≥14 | 318-342                     | 40-43 | 100 °C                  |
| 45M   | 1320-1380      | 13.2-13.8 | ≥995                   | ≥12.5 | ≥1114                          | ≥14 | 342-366                     | 43-46 | 100 °C                  |
| 48M   | 1360-1430      | 13.6-14.3 | ≥1027                  | ≥12.9 | ≥1114                          | ≥14 | 366-390                     | 46-49 | 100 °C                  |
| 50M   | 1400-1450      | 14.0-14.5 | ≥1033                  | ≥13.0 | ≥1114                          | ≥14 | 382-406                     | 48-51 | 100 °C                  |
| 33H   | 1130-1170      | 11.3-11.7 | ≥836                   | ≥10.5 | ≥1353                          | ≥17 | 247-271                     | 31-34 | 120 °C                  |
| 35H   | 1170-1220      | 11.7-12.2 | ≥868                   | ≥10.9 | ≥1353                          | ≥17 | 263-287                     | 33-36 | 120 °C                  |
| 38H   | 1220-1250      | 12.2-12.5 | ≥899                   | ≥11.3 | ≥1353                          | ≥17 | 287-310                     | 36-39 | 120 °C                  |
| 40H   | 1250-1280      | 12.5-12.8 | ≥923                   | ≥11.6 | ≥1353                          | ≥17 | 302-326                     | 38-41 | 120 °C                  |
| 42H   | 1280-1320      | 12.8-13.2 | ≥955                   | ≥12.0 | ≥1353                          | ≥17 | 318-342                     | 40-43 | 120 °C                  |
| 45H   | 1300-1360      | 13-13.6   | ≥963                   | ≥12.1 | ≥1353                          | ≥17 | 326-358                     | 43-46 | 120 °C                  |
| 48H   | 1370-1430      | 13.7-14.3 | ≥995                   | ≥12.5 | ≥1353                          | ≥17 | 366-390                     | 46-49 | 120 °C                  |
| 30SH  | 1080-1130      | 10.8-11.3 | ≥804                   | ≥10.1 | ≥1592                          | ≥20 | 223-247                     | 28-31 | 150 °C                  |
| 33SH  | 1130-1170      | 11.3-11.7 | ≥844                   | ≥10.6 | ≥1592                          | ≥20 | 247-271                     | 31-34 | 150 °C                  |
| 35SH  | 1170-1220      | 11.7-12.2 | ≥876                   | ≥11.0 | ≥1592                          | ≥20 | 263-287                     | 33-36 | 150 °C                  |
| 38SH  | 1220-1250      | 12.2-12.5 | ≥907                   | ≥11.4 | ≥1592                          | ≥20 | 287-310                     | 36-39 | 150 °C                  |
| 40SH  | 1240-1280      | 12.5-12.8 | ≥939                   | ≥11.8 | ≥1592                          | ≥20 | 302-326                     | 38-41 | 150 °C                  |
| 42SH  | 1280-1320      | 12.8-13.2 | ≥987                   | ≥12.4 | ≥1592                          | ≥20 | 318-342                     | 40-43 | 150 °C                  |
| 45SH  | 1320-1380      | 13.2-13.8 | ≥1003                  | ≥12.6 | ≥1592                          | ≥20 | 342-366                     | 43-46 | 150 °C                  |
| 28UH  | 1020-1080      | 10.2-10.8 | ≥764                   | ≥9.6  | ≥1990                          | ≥25 | 207-231                     | 26-29 | 180 °C                  |
| 30UH  | 1080-1130      | 10.8-11.3 | ≥812                   | ≥10.2 | ≥1990                          | ≥25 | 223-247                     | 28-31 | 180 °C                  |
| 33UH  | 1130-1170      | 11.3-11.7 | ≥852                   | ≥10.7 | ≥1990                          | ≥25 | 247-271                     | 31-34 | 180 °C                  |
| 35UH  | 1180-1220      | 11.8-12.2 | ≥860                   | ≥10.8 | ≥1990                          | ≥25 | 263-287                     | 33-36 | 180 °C                  |
| 38UH  | 1220-1250      | 12.2-12.5 | ≥876                   | ≥11.0 | ≥1990                          | ≥25 | 287-310                     | 36-39 | 180 °C                  |
| 40UH  | 1240-1280      | 12.5-12.8 | ≥899                   | ≥11.3 | ≥1990                          | ≥25 | 302-326                     | 38-41 | 180 °C                  |
| 28EH  | 1040-1090      | 10.4-10.9 | ≥780                   | ≥9.8  | ≥2388                          | ≥30 | 207-231                     | 26-29 | 200 °C                  |
| 30EH  | 1080-1130      | 10.8-11.3 | ≥812                   | ≥10.2 | ≥2388                          | ≥30 | 223-247                     | 28-31 | 200 °C                  |
| 33EH  | 1130-1170      | 11.3-11.7 | ≥836                   | ≥10.5 | ≥2388                          | ≥30 | 247-271                     | 31-34 | 200 °C                  |
| 35EH  | 1170-1220      | 11.7-12.2 | ≥876                   | ≥11.0 | ≥2388                          | ≥30 | 263-287                     | 33-36 | 200 °C                  |
| 38EH  | 1220-1250      | 12.2-12.5 | ≥899                   | ≥11.3 | ≥2388                          | ≥30 | 287-310                     | 36-39 | 200 °C                  |