

Magnets

NVE offers several popular permanent magnets for use with magnetic sensors. In addition to individual magnets, NVE offers evaluation kits containing assortments of magnets, magnetic sensors, and printed circuit boards for sensor system development.

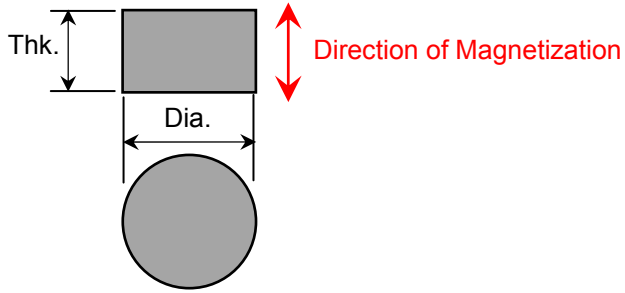
The following magnets are available:



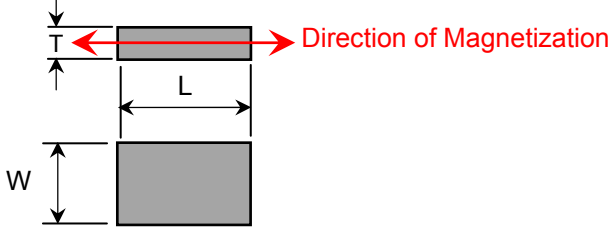
| NVE Part No. | Description | Dimensions | Typ. Field at Face | Evaluation Kits |
|--------------|-------------------------------------|------------------------------------|--------------------|-------------------------------------|
| 12030 | Ferrite Bar Magnet | 0.5" L x 0.125" W x 0.25" T | 1500 Oe | AG001-01, AG040, AG940, and others |
| 12031 | Ferrite Disk Magnet | 0.312" dia. x 0.125" thick | 900 Oe | AG001-01 |
| 12032 | Ferrite Bar Magnet | 1" L x 0.125" W x 0.39" T | 1800 Oe | AG910-07; AG911-07 |
| 12216 | Ferrite Disk Magnet | 6 mm dia. x 4 mm thick | 1100 Oe | AG920-07 |
| 12217 | Ferrite Disk Magnet | 3.5 mm dia. x 4 mm thick | 1700 Oe | AG920-07 |
| 12249 | Split-Pole Ferrite Disk | 12 mm dia. x 4 mm thick | 1000 Oe | None (suitable for AAT/ADT sensors) |
| 12426 | Alnico-5 Split-Pole Round Horseshoe | 0.44" dia. x 0.44" H (see fig.) | 1100 Oe | AAT- and ADT-Series angle sensors |

Use our [Web application calculators](http://www.nve.com/spec/calculators.php) (www.nve.com/spec/calculators.php) to estimate the magnet fields at various distances.

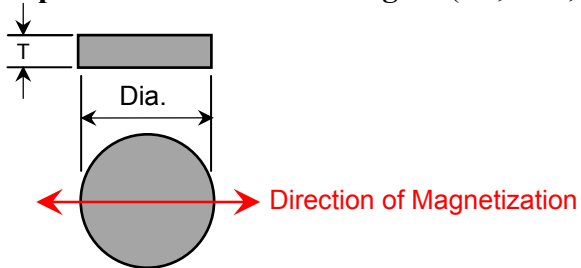
Disc Magnets (C5, Y25, or similar)



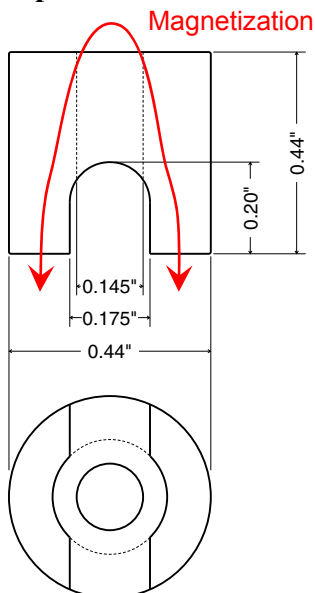
Bar Magnets (C1, Y10T, C5, Y25, or similar)



12249 Split-Pole Ferrite Disk Magnet (C5, Y25, or similar)



12426 Split-Pole Round Horseshoe Magnet (Alnico 5)

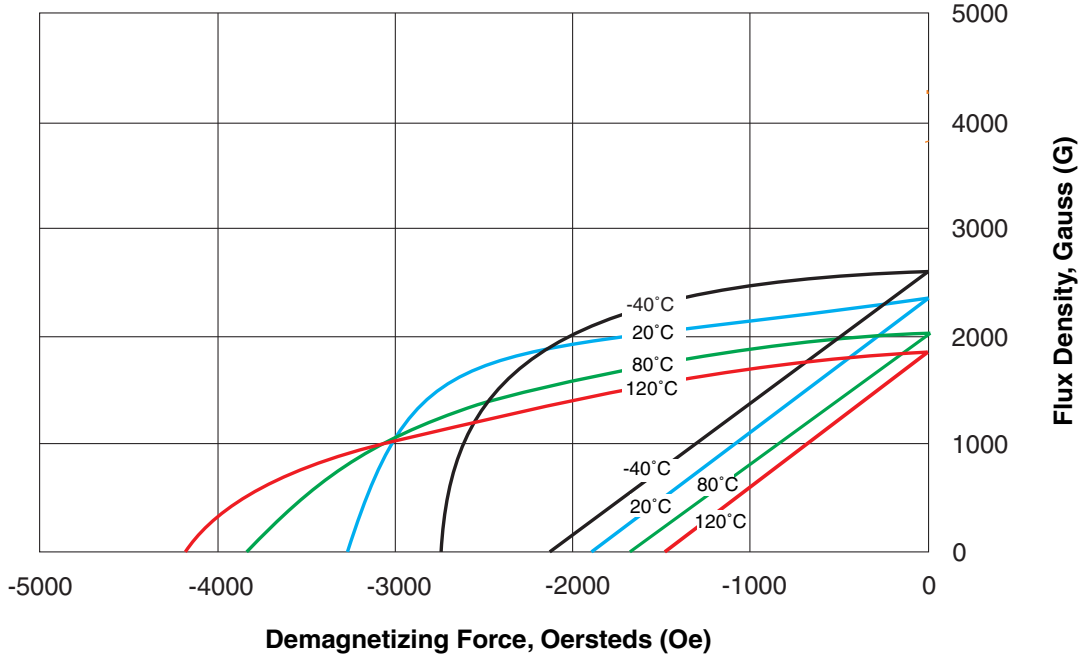


Magnet Material Specifications

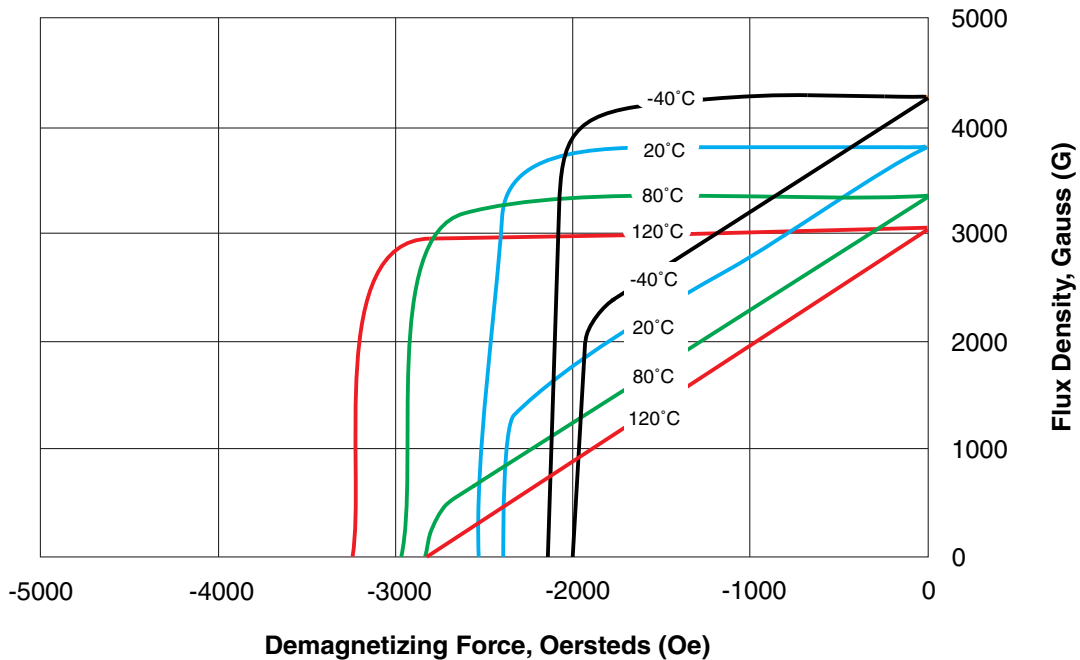
| | C1/Y10T | C5/Y25 | Alnico-5 |
|---|----------------|---------------|-----------------|
| Maximum Operating Temperature | 300°C | 300°C | 525°C |
| Curie Temperature | 450°C | 450°C | 860°C |
| Temperature Coefficient of Flux Density | -0.20%/°C | -0.20%/°C | -0.02%/°C |
| Maximum Energy Product | 1 MGOe | 3.4 MGOe | 5.5 MGOe |
| Residual Induction | 2175 Gauss | 3800 Gauss | 12800 Gauss |
| Coercive Force | 1800 Oe | 2400 Oe | 640 Oe |

Material Characteristics

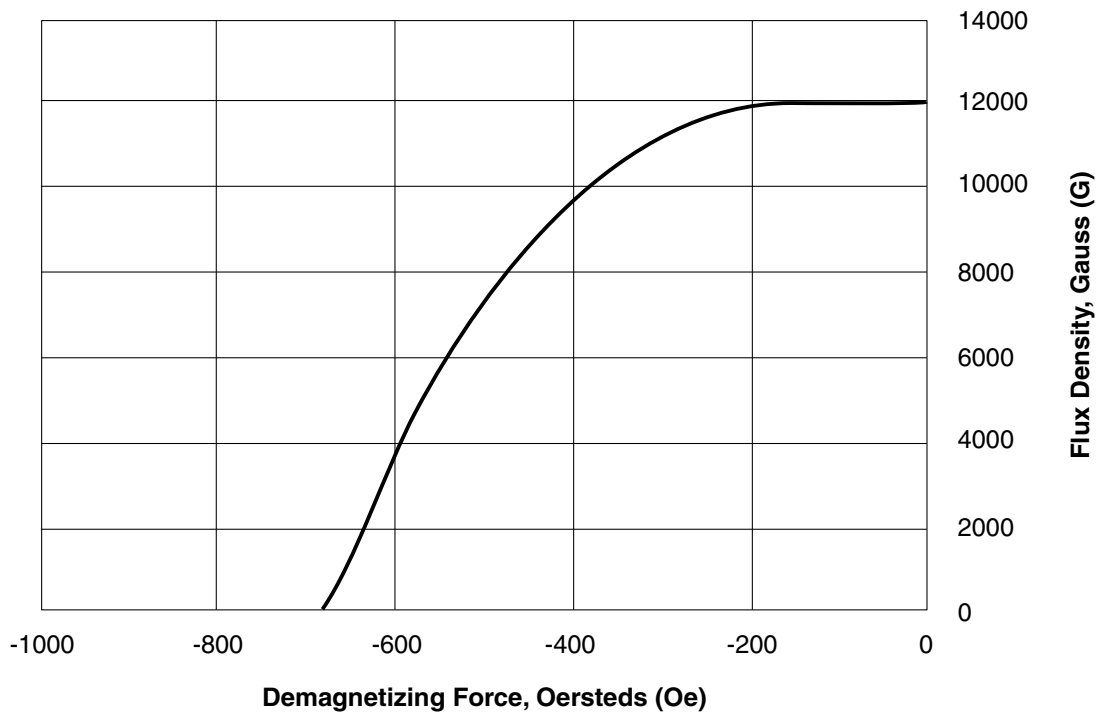
C1/Y10T Magnetic Characteristics



C5/Y25 Magnetic Characteristics



Alnico-5 Magnetic Characteristics



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