

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:

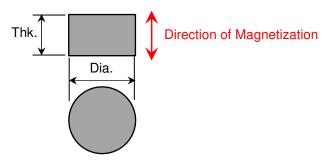


NVE			Typ.	
Part No.	Description	Dimensions	Field at Face	Evalution Kits
12030	Ferrite Bar Magnet	0.5" L x 0.125" W x 0.25" T	150 mT	AG001-01, AG040,
				AG940, and others
12031	Ferrite Disk Magnet	0.312" dia. x 0.125" thick	90 mT	AG001-01
12032	Ferrite Bar Magnet	1" L x 0.125" W x 0.39" T	180 mT	AG910-07; AG911-07
12216	Ferrite Disk Magnet	6 mm dia. x 4 mm thick	110 mT	AG920-07
12217	Ferrite Disk Magnet	3.5 mm dia. x 4 mm thick	170 mT	AG920-07
12249		12 mm dia. x 4 mm thick	100 mT	None
12526	Diametrically- Magnetized Disk Magnets	4 mm dia. x 4 mm thick	80 mT	(compatible with
12527		8 mm dia. x 4 mm thick	90 mT	AAT/ADT/ADT/ASR-
12528		8 mm dia. x 8 mm thick	100 mT	Series sensors)
12426	Alnico-5 Split-Pole	0.44" dia. x 0.44" H	110 mT	AAT/ADT/ADT/ASR-
	Round Horseshoe	(see fig.)	110 1111	Series angle sensors

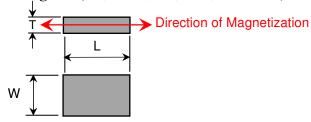
Use our <u>Web application calculators</u> (www.nve.com/spec/calculators.php) to estimate the magnet fields at various distances.



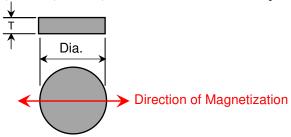
Disc Magnets (C5, Y25, or similar)



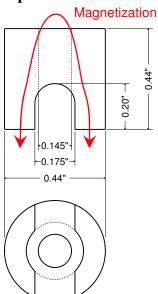
Bar Magnets (C1, Y10T, C5, Y25, or similar)



12249, 12526, 12527, and 12528 Diametrically-Magnetized Magnets (C5, Y25, or similar)



12426 Split-Pole Round Horseshoe Magnet (Alnico 5)



NVE Corporation

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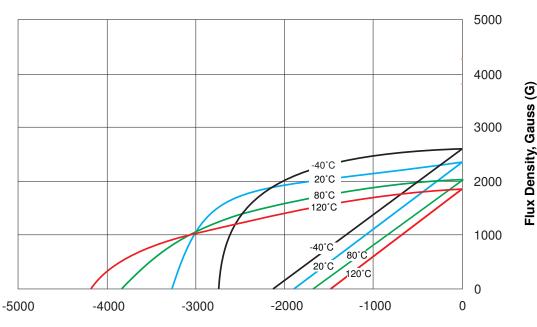
Magnet Material Specifications

	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



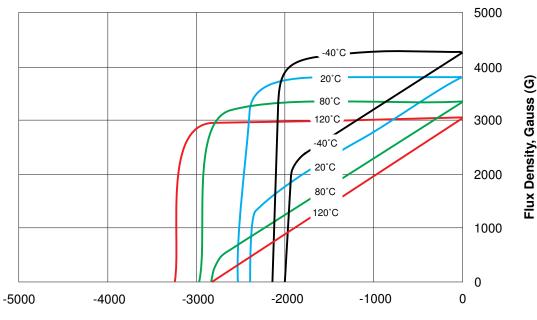
Material Characteristics

C1/Y10T Magnetic Characteristics



Demagnetizing Force, Oersteds (Oe)

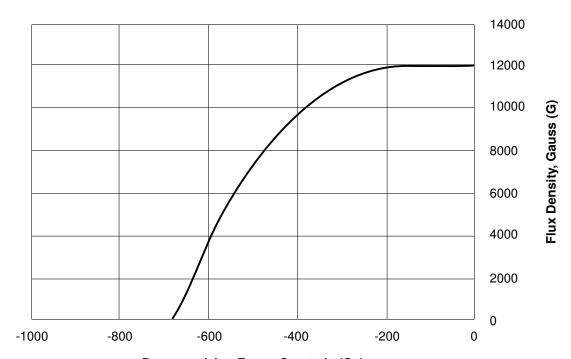
C5/Y25 Magnetic Characteristics



Demagnetizing Force, Oersteds (Oe)



Alnico-5 Magnetic Characteristics



Demagnetizing Force, Oersteds (Oe)



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