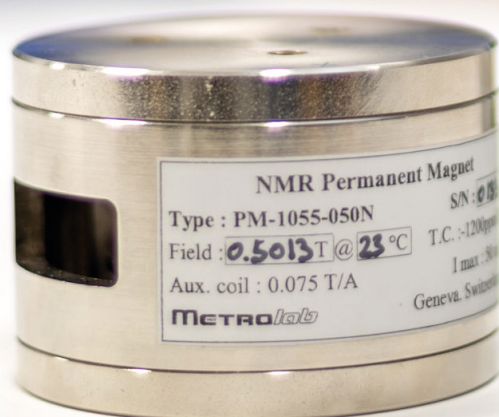


## DIPOLE PERMANENT MAGNET PM-1055

A SECONDARY FIELD REFERENCE FOR NMR TESTING AND HALL TESLAMETERS CALIBRATION



*Global Market leader for precision magnetometers*

- **High Field Homogeneity:** Achieved with a large gap, despite the magnet's compact size
- **NMR Magnetometer Testing:** Simplifies testing without requiring a large magnet
- **Stable Field Generation:** Ideal for calibrating Hall magnetometers; primary calibration via NMR
- **No Power Supply Needed:** Suitable as B0 field of a portable NMR spectrometer
- **Field Strength Variability:** Offers field strengths from 0.01 T to 0.5 T
- **Minimized Stray Field:** The PM-1055 magnet's design limits interference from nearby ferrous materials
- **Field Compensation Coil:** Compatible with PT2026 Metrolab NMR magnetometer for field compensation or low-frequency field modulation (< 11Hz)



Highly  
homogeneous field



Field strength ranging  
from 0.01 T to 0.5 T



NMR  
compatible



Compact, fits in the  
palm of your hand



Built-in  
compensation loop



Excellent  
stability



ISO 17025 ACCREDITED

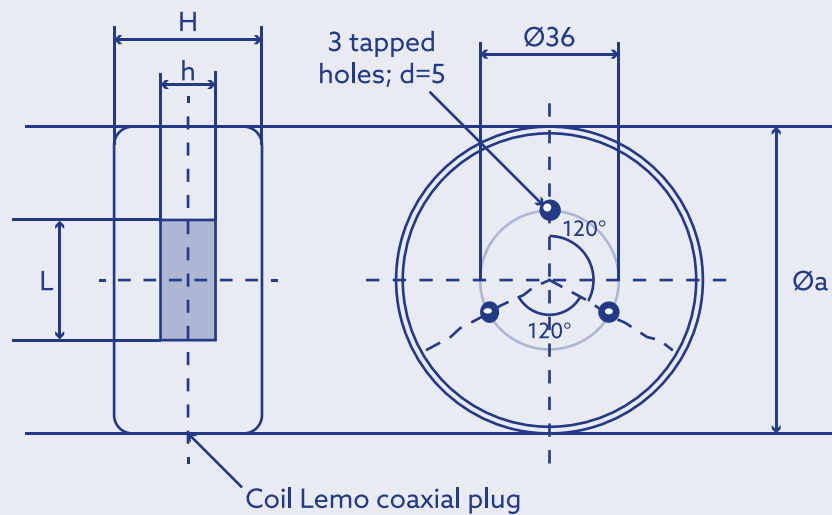
### ABOUT METROLAB

We are the **global market leader** for precision magnetometers.

Established in Switzerland in **1985**, we have won the trust of all the large physics laboratories and all leading players in Magnetic Resonance Imaging, **across the world.**

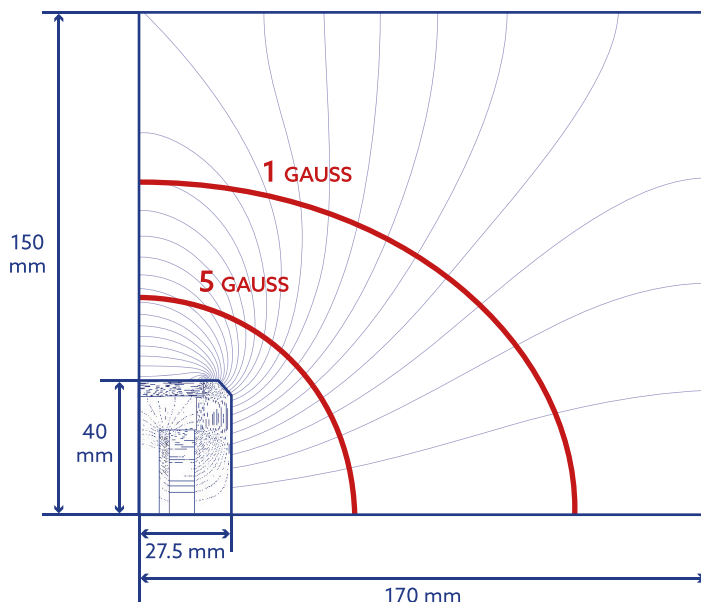
With Metrolab, you measure magnetic fields with **Swiss precision and quality.**

## PHYSICAL DIMENSIONS AND SPECIFICATIONS



### Ordering denomination

PM-1055 ...	-001F	-005F	-010F	-027S	-050N
Tesla value (+/-10%)	0.01	0.05	0.105	0.27	0.5
Magnet core material	Ferrite	Ferrite	Ferrite	Sm/Co	Nd/Fe/B
Temp.coeff. (ppm/°K)	-2100	-2100	-2100	-350	-1200
Size (Øa x H mm)	80 x 39	80 x 39	80 x 39	80 x 39	80 x 55
3 tapped holes: 120°/Ø36	M4	M4	M4	M4	M6
Gap (Ø x H mm)	50 x 13	50 x 13	50 x 13	50 x 13	50 x 13
Homogeneous diam. (mm)	12	12	12	12	12
Aperture (L x h mm)	32 x 14	32 x 14	32 x 14	32 x 14	32 x 14
Auxil. coil (+/-T/A)	0.06	0.06	0.06	0.06	0.075
I <sub>max</sub> (+/-mA)	50	50	50	50	50
Approx. Weight (g)	920	920	920	920	1250



### STRAY FIELD MAP

For this purpose, we only represent ¼ of the region around the magnet, because of the symmetry.

The graph concerns magnet PM-1055-050N, and the two red lines delimit the 1 and 5 gauss zones (0.1 and 0.5 mT), corresponding respectively to  $2 \cdot 10^{-4}$  and  $10^{-3}$  of the gap field.

This graph shows the dimensions of the zone affected by the presence of the magnet, but also where ferrous magnetic pieces should not be placed in order not to affect value of the inner field.

Specifications are subject to change; for details and up-to-date specifications, see:  
[www.metrolab.com/products/pm1055-aimants-permanents/](http://www.metrolab.com/products/pm1055-aimants-permanents/)

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