Problem info

Problem type: Magnetostatics
Geometry model class: Plane-Parallel
Problem database file names:

- Problem: *Pickup_1.pbm*
- Geometry: *Pickup_1.mod*
- Material Data: *Pickup_1.dms*
- Material Data 2 (library): *none*
- Electric circuit: *none*

Results taken from other problems:

- *none*

Geometry model

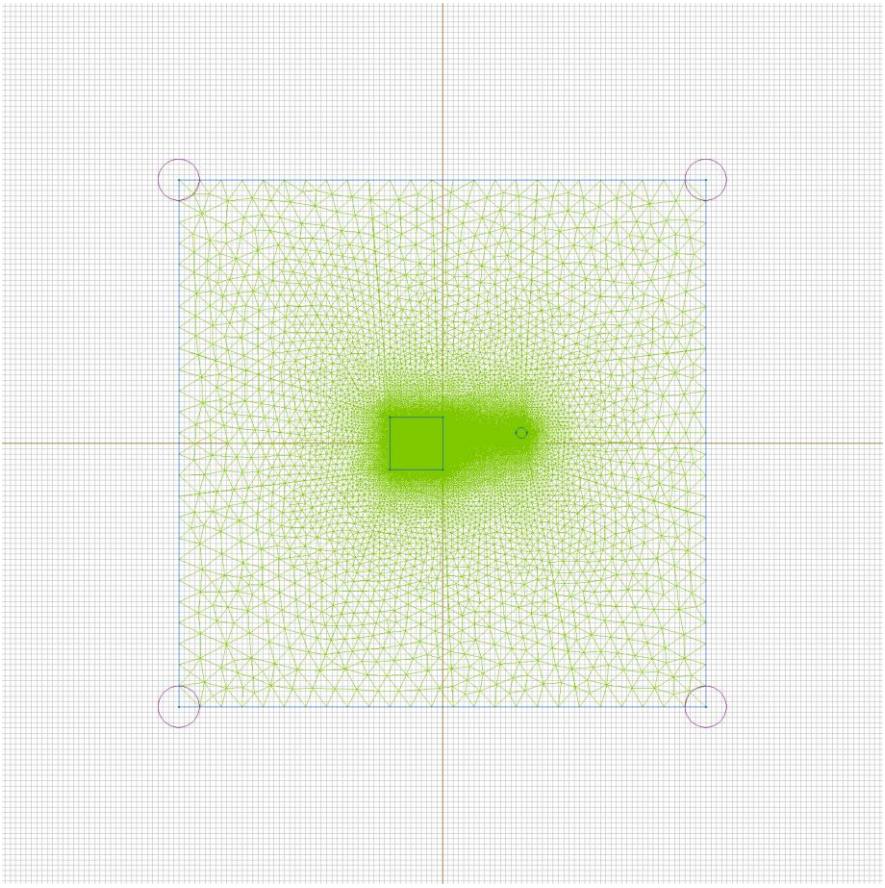


Table 1. Geometry model statistics

	With Label	Total
Blocks	3	3
Edges	1	10
Vertices	0	10

Number of nodes: 66014.

Labelled objects

There are following labelled objects in the geometry model (Material Data file could contain more labels, but only those labels that assigned to geometric objects are listed)

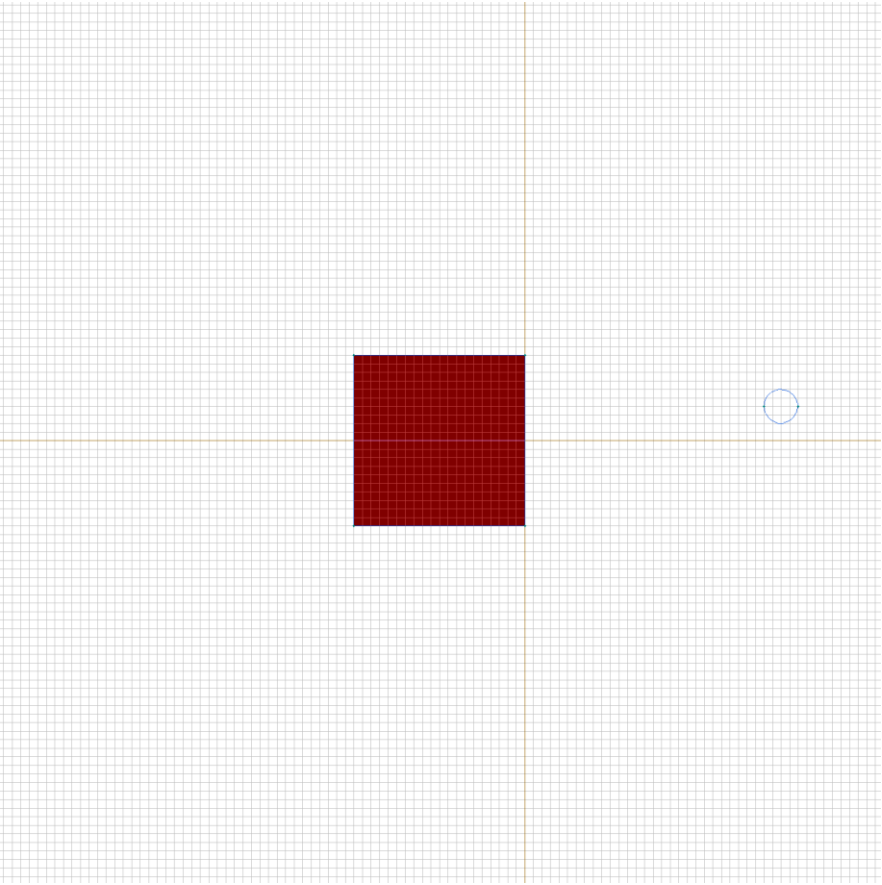
Blocks:	Edges:	Vertices:
• Magnet • Air • String •	• Wall •	

Detailed information about each label is listed below.

Labelled objects: block "Magnet"

There are (1) objects with this label

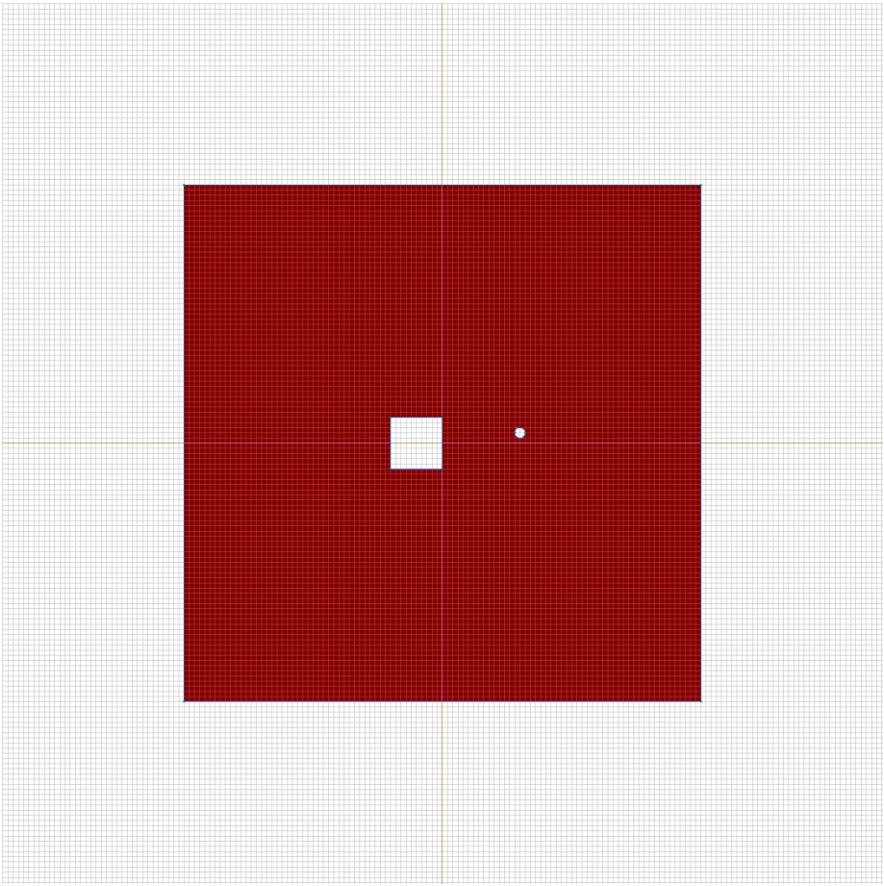
Relative magnetic permeability: mu_x=1000, mu_y=1000
Coercive force: Hc=1000000 [A], direction: 0 [deg]
Current density: j=0 [A/m2]
Conductor's connection: in parallel



Labelled objects: block "Air"

There are (1) objects with this label

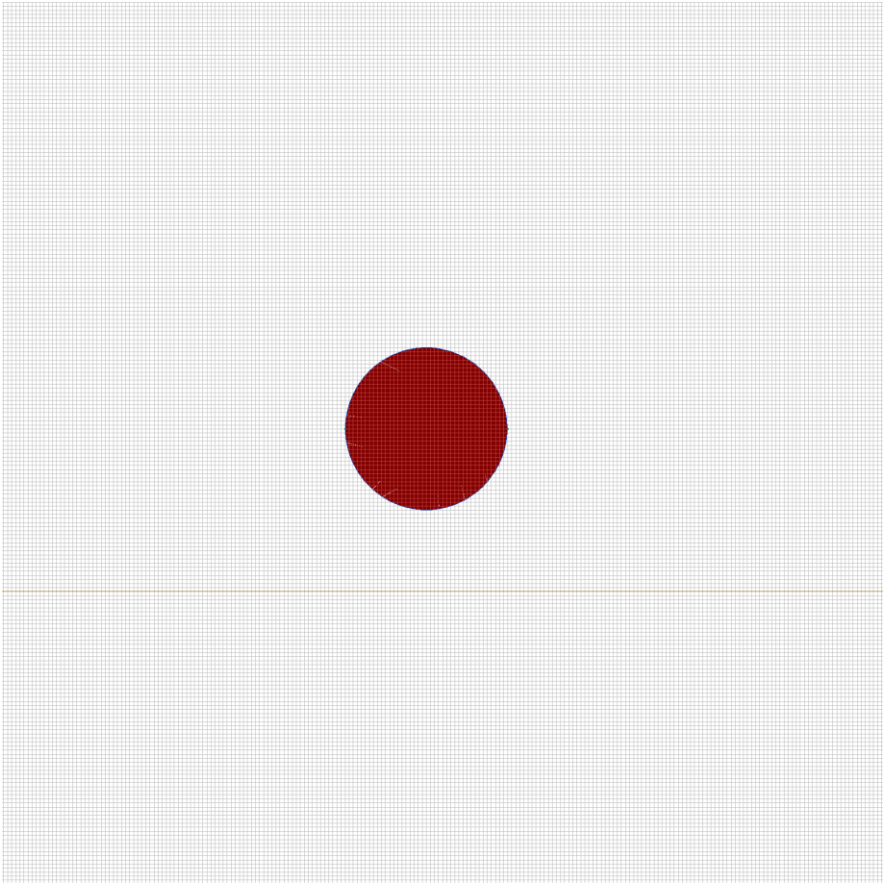
Relative magnetic permeability: mu_x=1, mu_y=1
Current density: j=0 [A/m2]
Conductor's connection: in parallel



Labelled objects: block "String"

There are (1) objects with this label

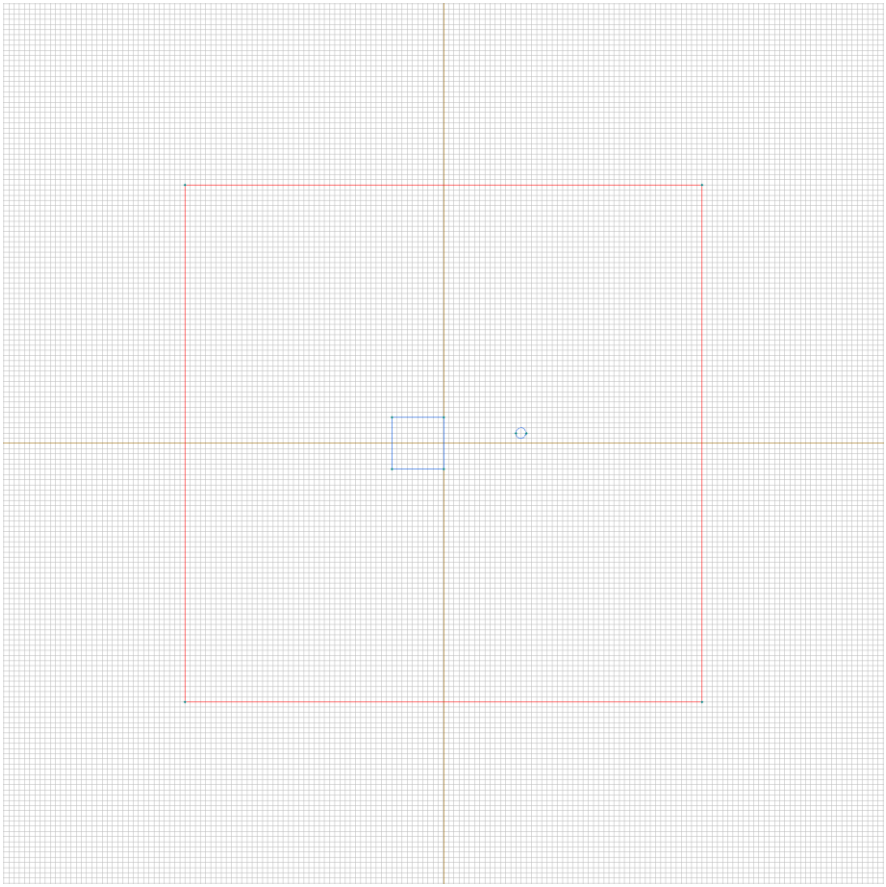
Relative magnetic permeability: mu_x=10000, mu_y=10000
Current density: j=0 [A/m2]
Conductor's connection: in parallel



Labelled objects: edge "Wall"

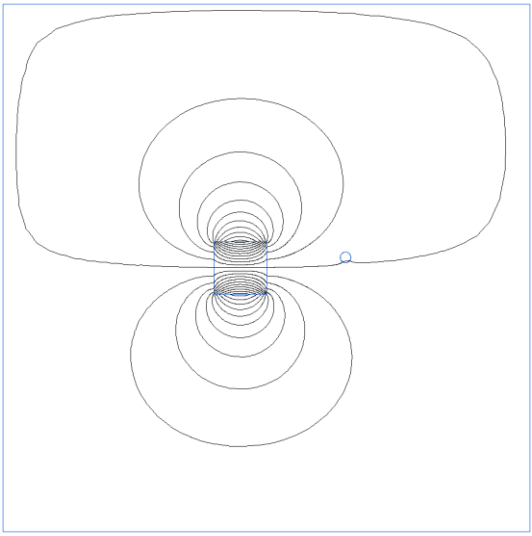
There are (4) objects with this label

Magnetic potential: A=0 [Wb/m]



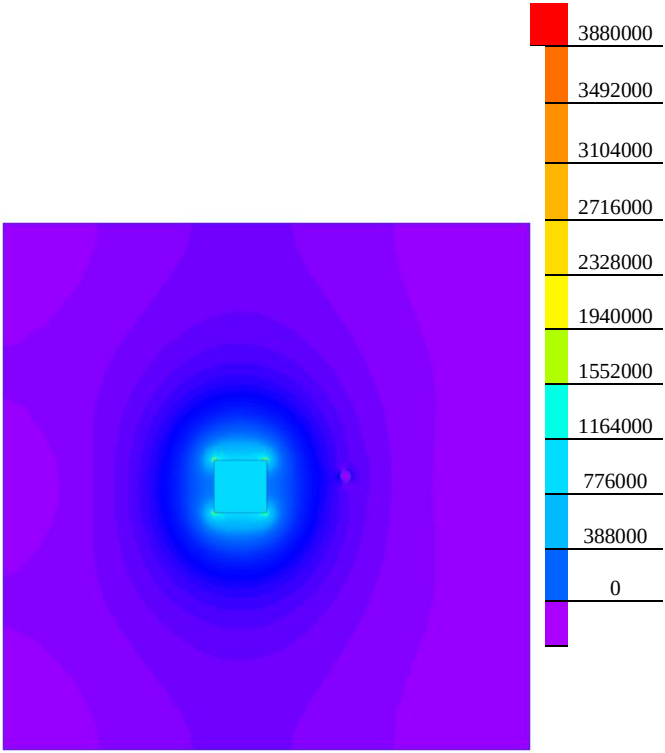
Results

Field lines



Results

Color map of Strength |H| [A/m]



Nonlinear dependencies

No non-linear dependencies are used in this problem data