Problem info

Problem type: AC Magnetics , frequency: 50 Hz,
Geometry model class: Plane-Parallel
Problem database file names:

- Problem: *Conduttore in presenza di corpo magnetico.pbm*
- Geometry: *Conduttore in presenza di corpo magnetico.mod*
- Material Data: *Conduttore in presenza di corpo magnetico.dhe*
- Material Data 2 (library): *Conduttore in presenza di corpo magnetico.dhe*
- Electric circuit: *none*

Results taken from other problems:

- *none*

Geometry model

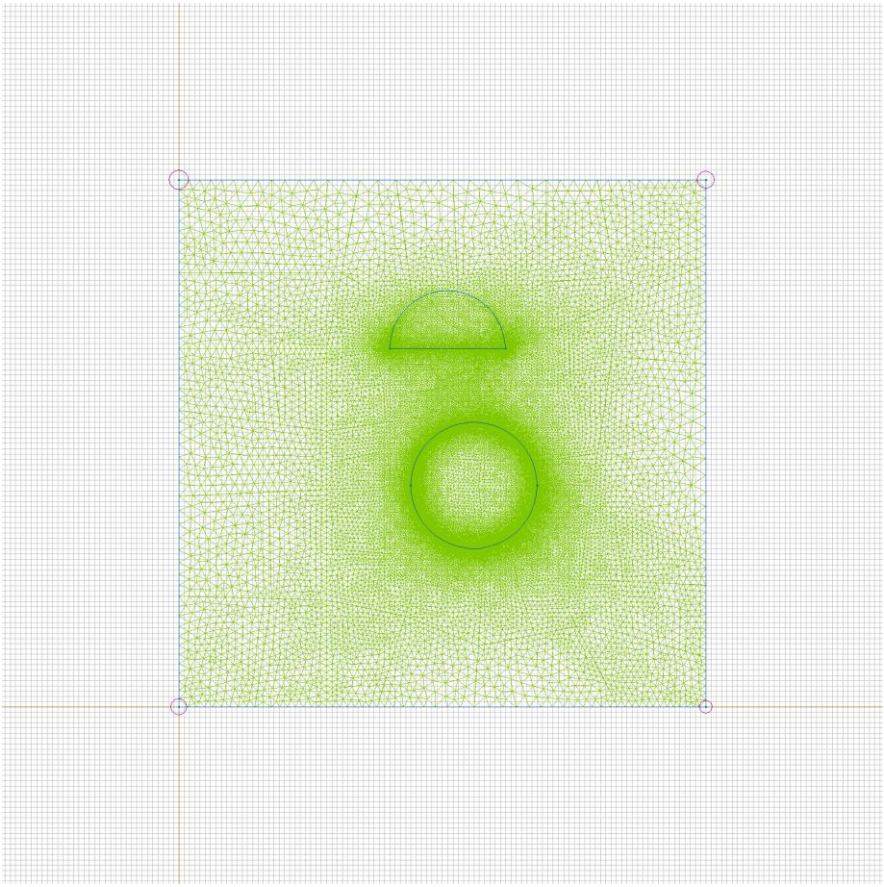


Table 1. Geometry model statistics

	With Label	Total
Blocks	3	3
Edges	4	8
Vertices	0	8

Number of nodes: 49836.

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)

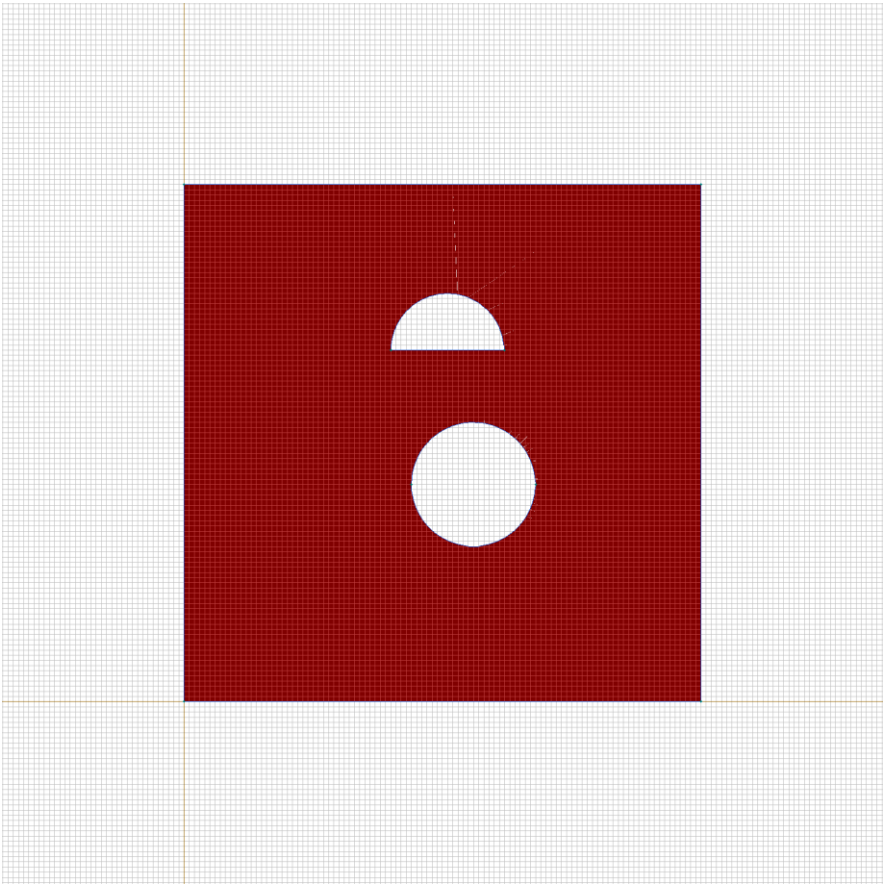
Blocks:	Edges:	Vertices:
• aria • cerchio • semicerchio •	• orizzontale sup • verticale 2 • orizzontale inf • verticale 1 •	

Detailed information about each label is listed below.

Labelled objects: block "aria"

There are (1) objects with this label

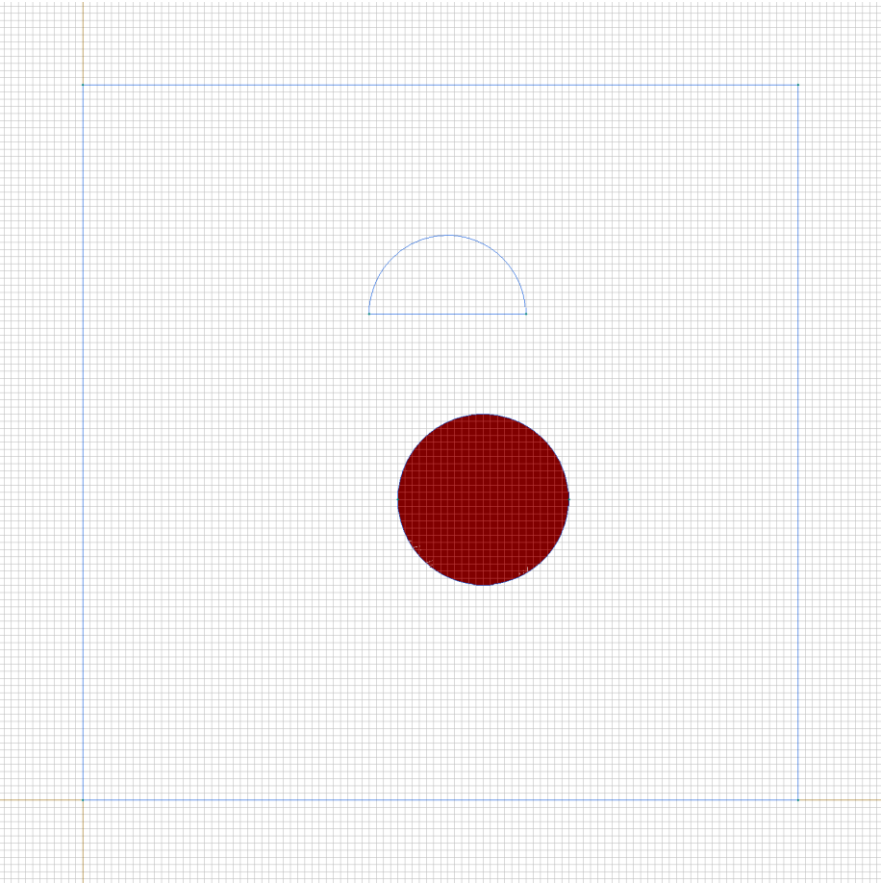
Relative magnetic permeability: mu_x=1, mu_y=1
Electric conductivity: sigma=0 [S/m]
Total current: I=0 [A], phase 0 [deg]
Conductor's connection: in parallel



Labelled objects: block "cerchio"

There are (1) objects with this label

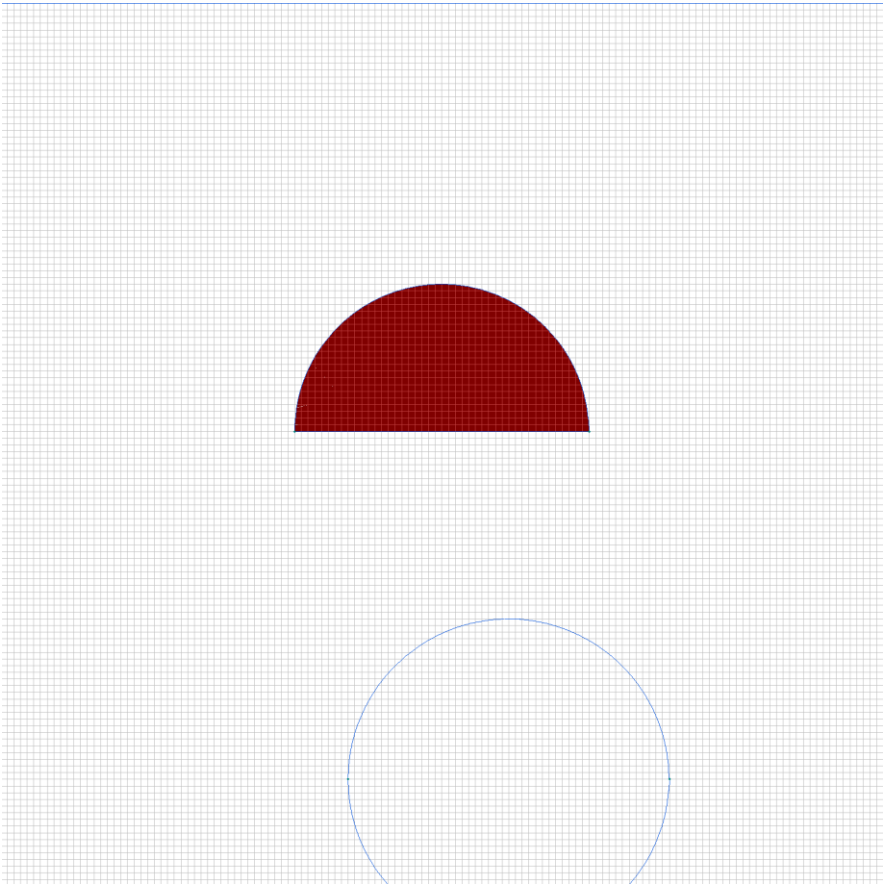
Relative magnetic permeability: mu_x=1, mu_y=1
Electric conductivity: sigma=58000000 [S/m]
Total current: I=1000 [A], phase 0 [deg]
Conductor's connection: in parallel



Labelled objects: block "semicerchio"

There are (1) objects with this label

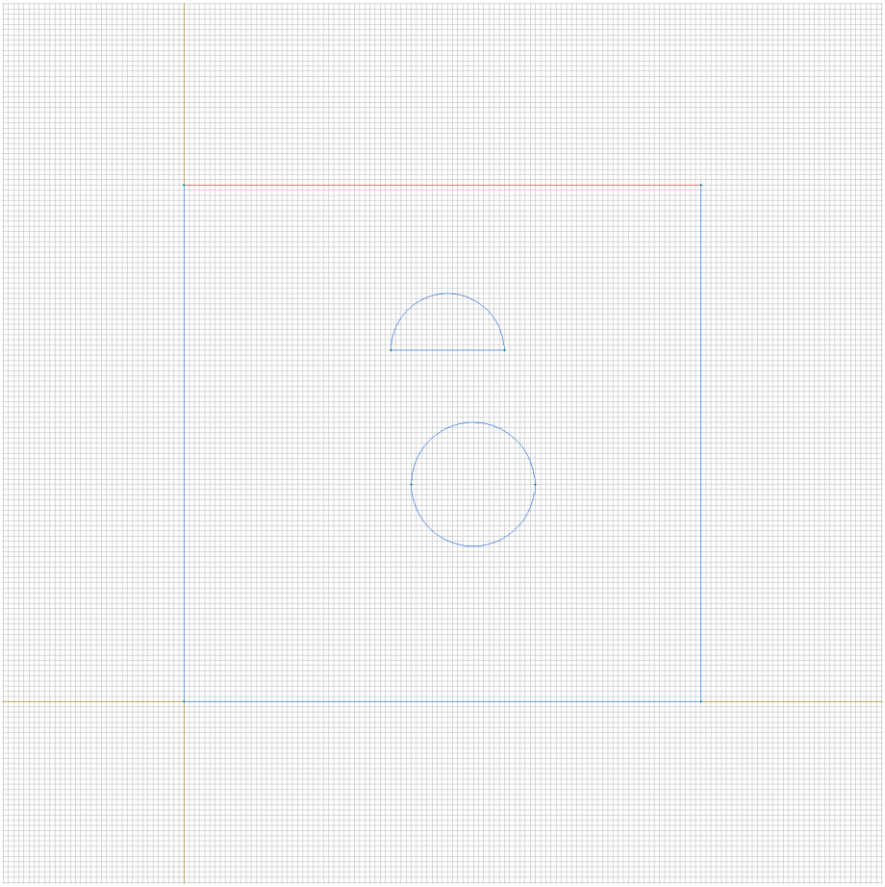
Relative magnetic permeability: mu_x=20000, mu_y=20000
Electric conductivity: sigma=100000 [S/m]
Total current: I=0 [A], phase 0 [deg]
Conductor's connection: in parallel



Labelled objects: edge "orizzontale sup"

There are (1) objects with this label

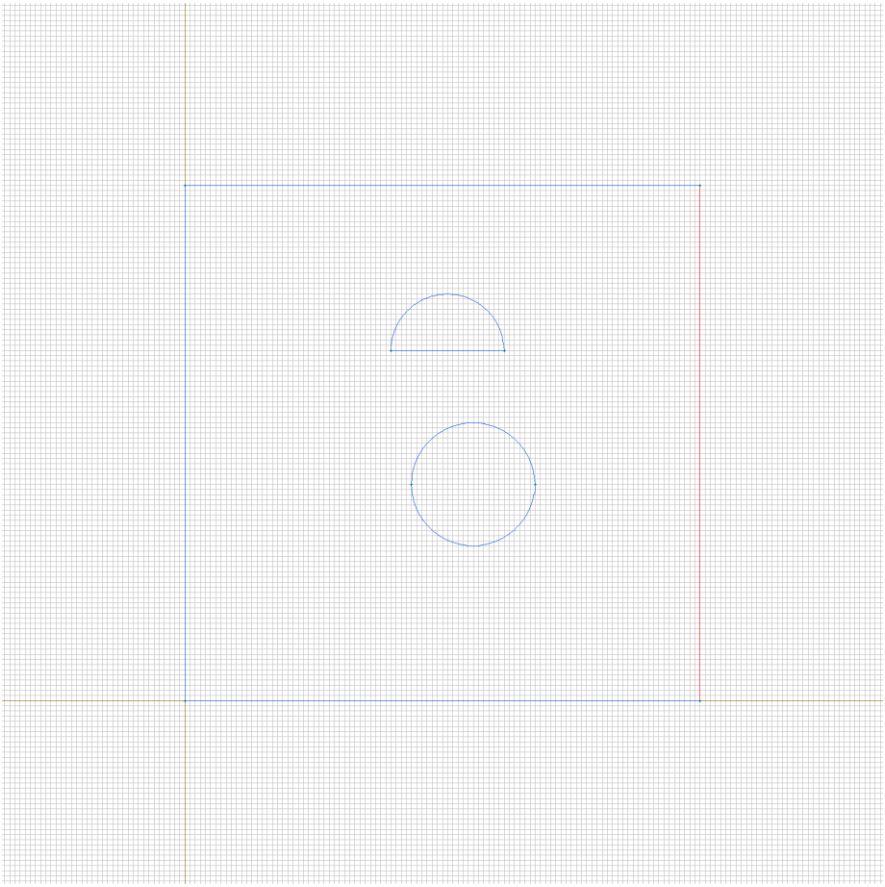
Magnetic potential: A=0 [Wb/m], phase 0 [deg]



Labelled objects: edge "verticale 2"

There are (1) objects with this label

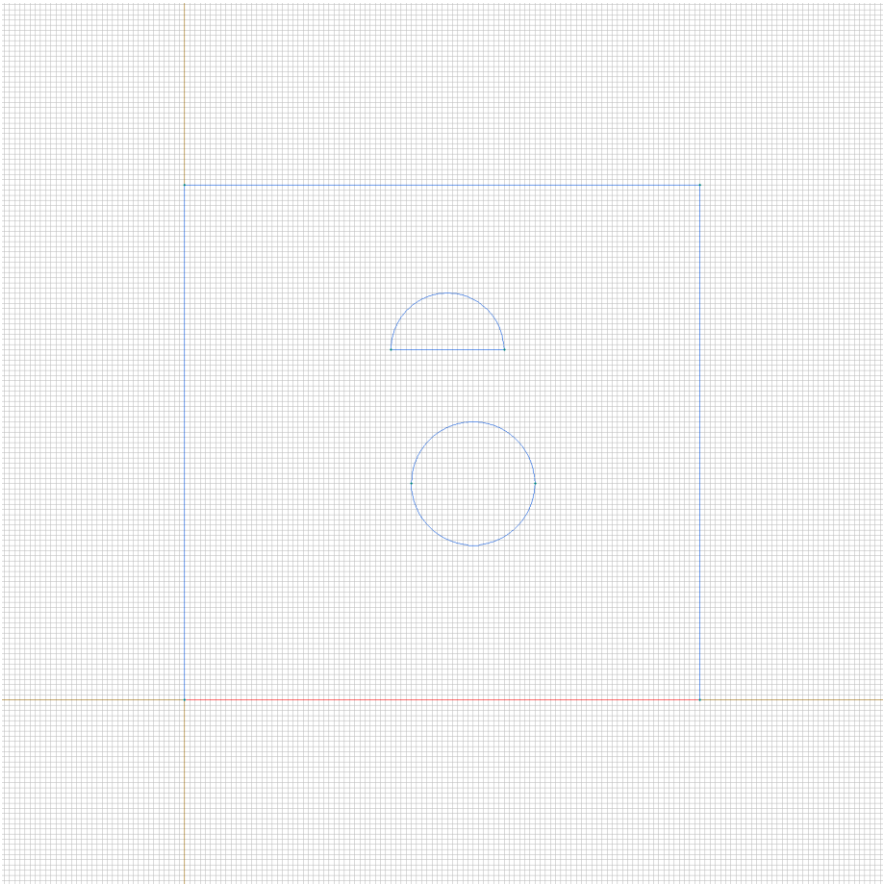
Magnetic potential: A=0 [Wb/m], phase 0 [deg]



Labelled objects: edge "orizzontale inf"

There are (1) objects with this label

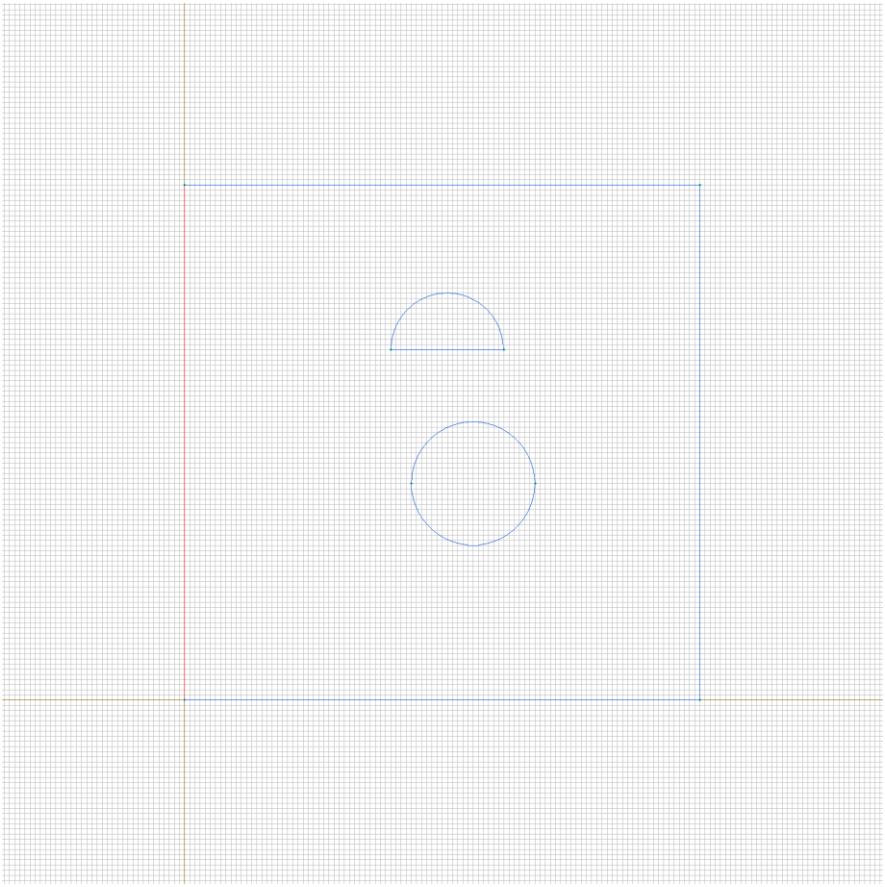
Magnetic potential: A=0 [Wb/m], phase 0 [deg]



Labelled objects: edge "verticale 1"

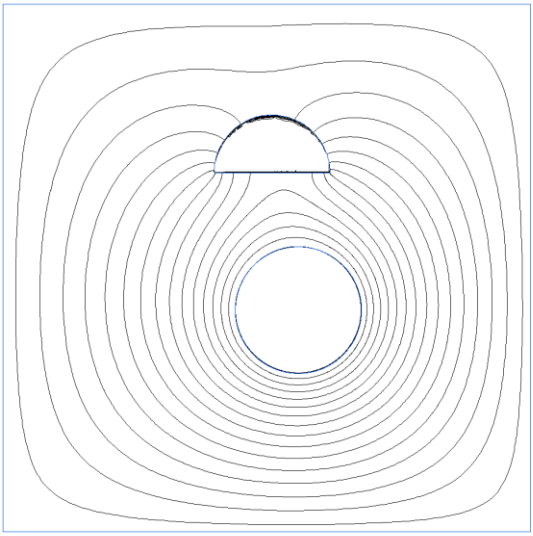
There are (1) objects with this label

Magnetic potential: A=0 [Wb/m], phase 0 [deg]



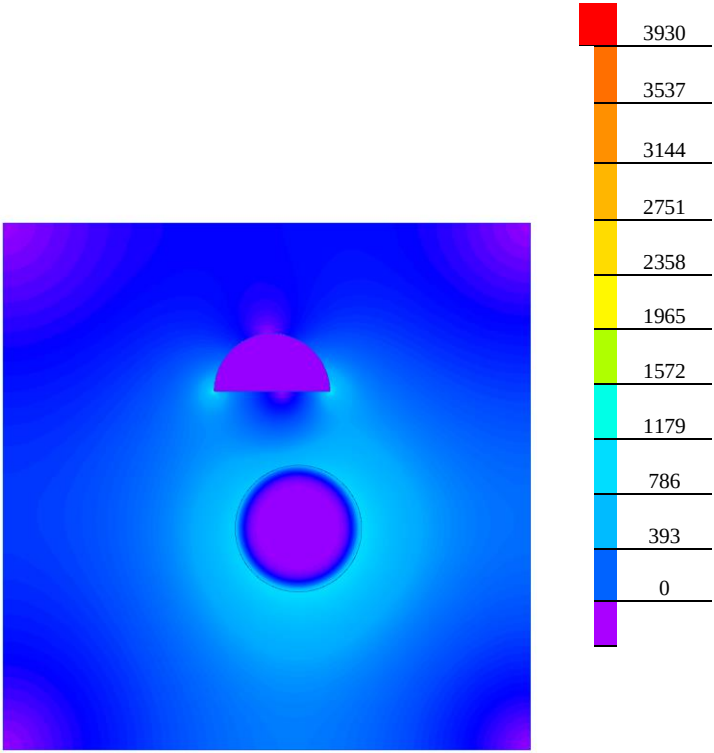
Results

Field lines



Results

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



Nonlinear dependencies

No non-linear dependencies are used in this problem data