

Problem info

Problem type: AC Conduction , frequency:

1.00000004749745E-03 Hz,

Geometry model class: Axisymmetric

Problem database file names:

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

Results taken from other problems:

- *none*

Geometry model

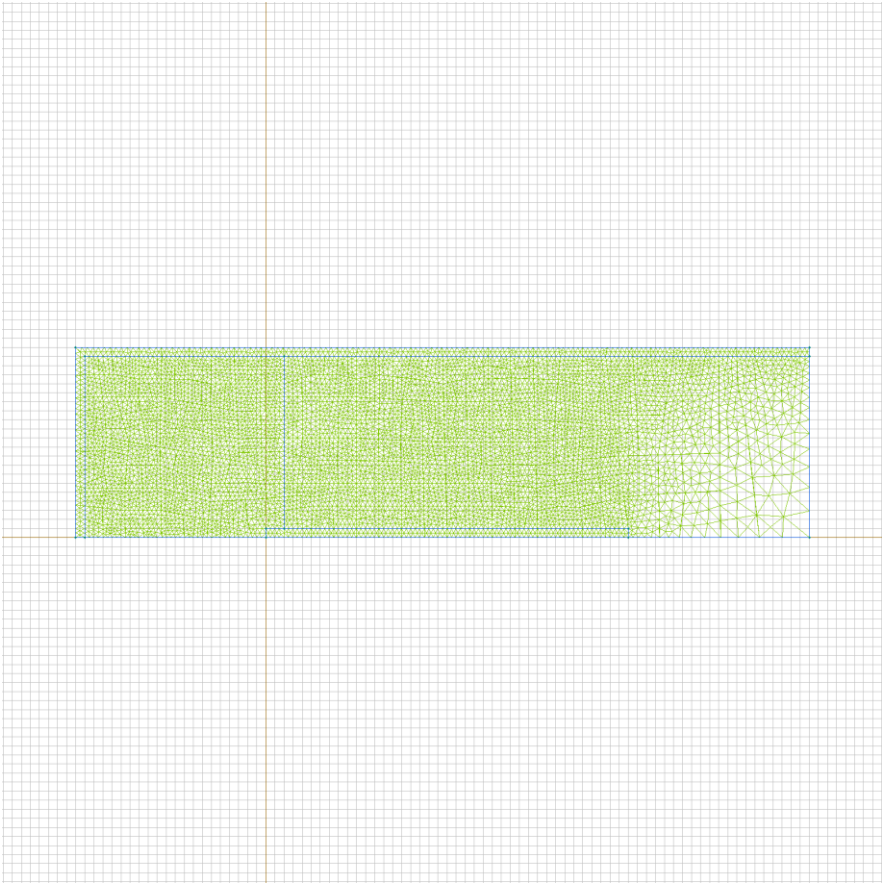


Table 1. Geometry model statistics

	With Label	Total
Blocks	4	4
Edges	4	16
Vertices	1	13

Number of nodes: 7421.

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:

- [Vessel](#)
- [Rod](#)
- [Medium](#)
- [Air](#)
-

Edges:

- [Bottom_Rod](#)
- [Level](#)
- [Top_Rod](#)
- [Surface](#)
-

Vertices:

- [VoltageMeasured](#)
-

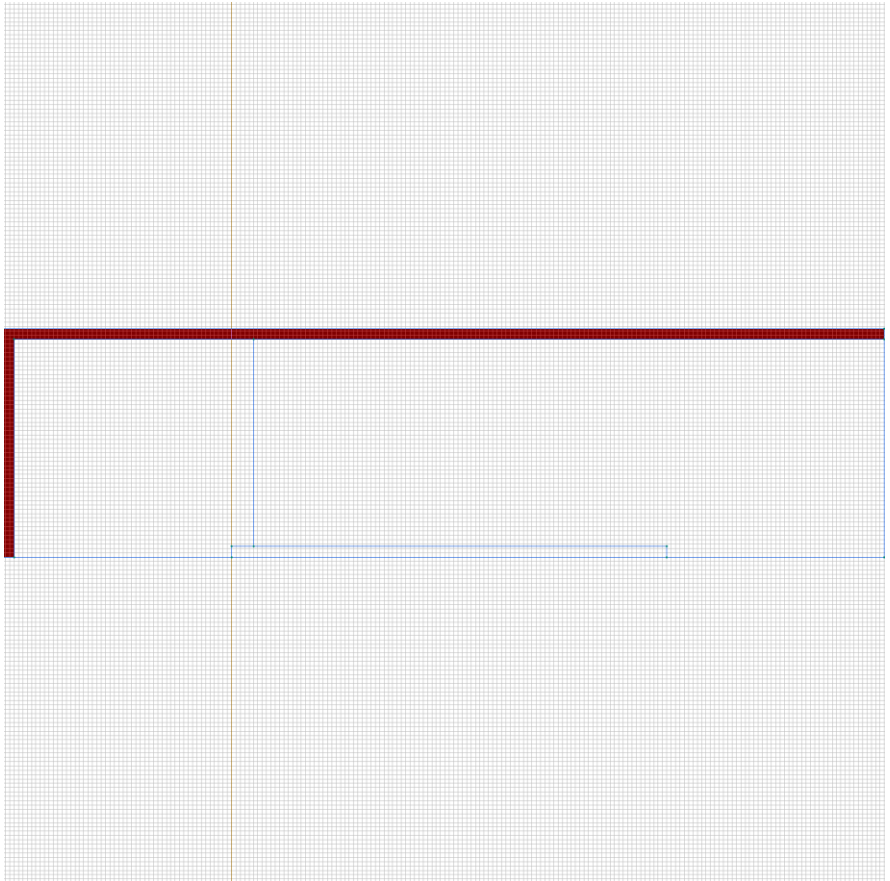
Detailed information about each label is listed below.

Labelled objects: block "Vessel"

There are (1) objects with this label

Relative electric permittivity $\epsilon_{sx}=1000000000$,
 $\epsilon_{sy}=1000000000$

Electrical conductivity $\sigma_x=6000000$ [S/m],
 $\sigma_y=6000000$ [S/m]

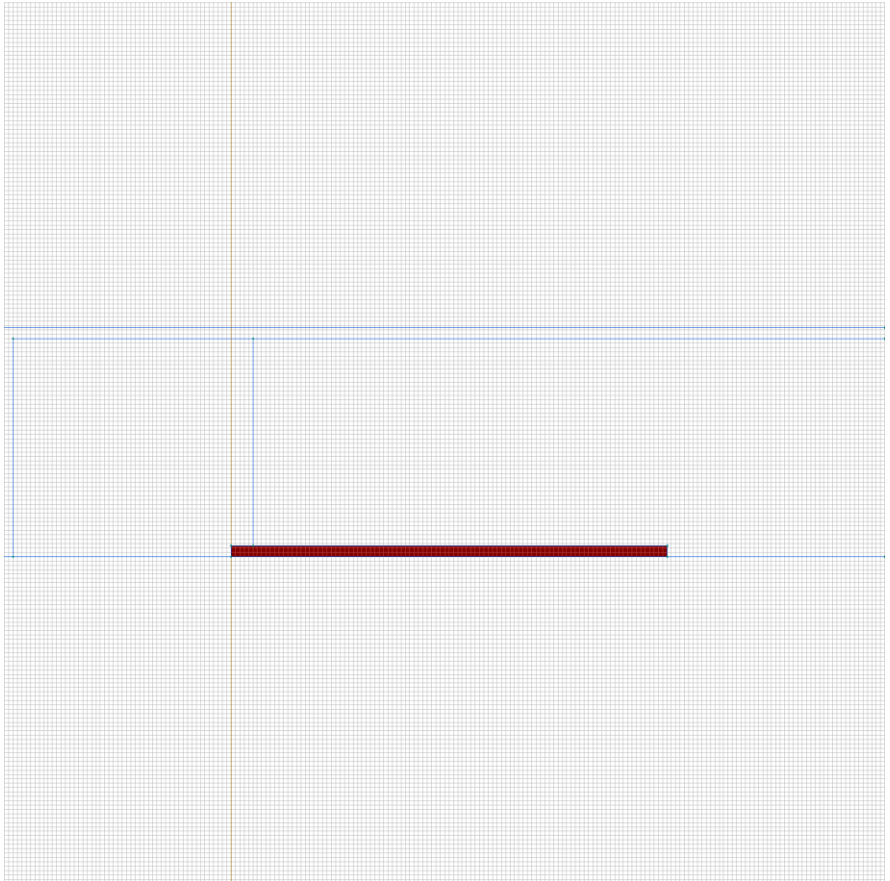


Labelled objects: block "Rod"

There are (1) objects with this label

Relative electric permittivity $\epsilon_{sx}=1000000000$,
 $\epsilon_{sy}=1000000000$

Electrical conductivity $\sigma_x=6000000$ [S/m],
 $\sigma_y=6000000$ [S/m]

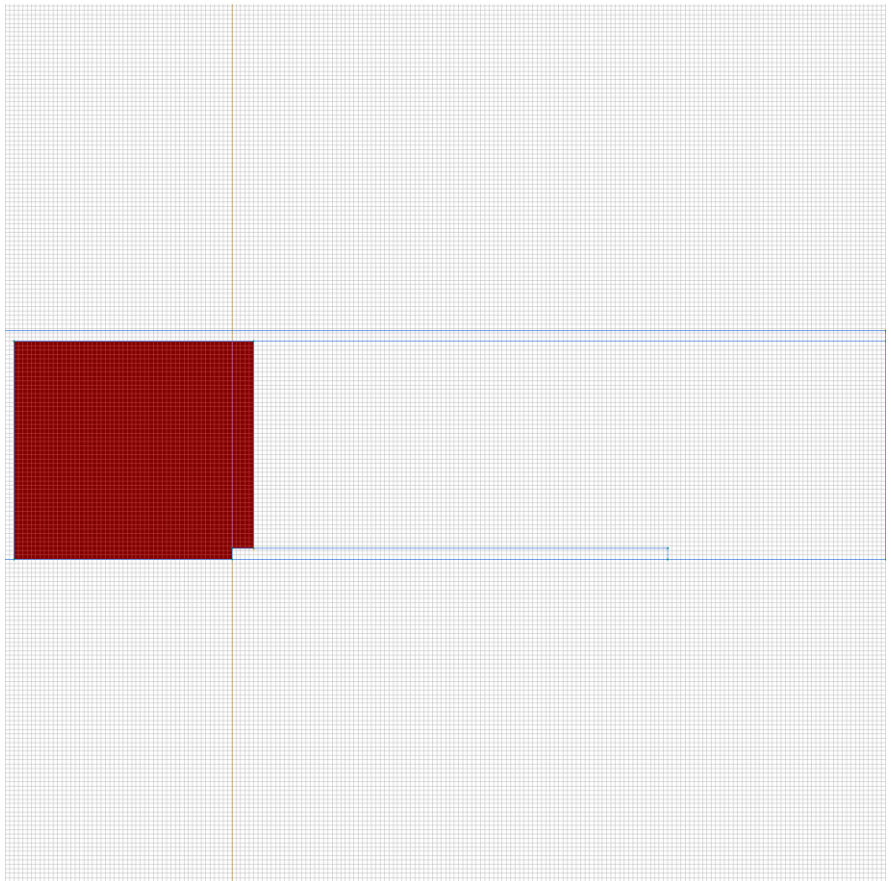


Labelled objects: block "Medium"

There are (1) objects with this label

Relative electric permittivity $\epsilon_{sx}=81$, $\epsilon_{sy}=81$

Electrical conductivity $\sigma_x=0.1$ [S/m], $\sigma_y=0.1$ [S/m]

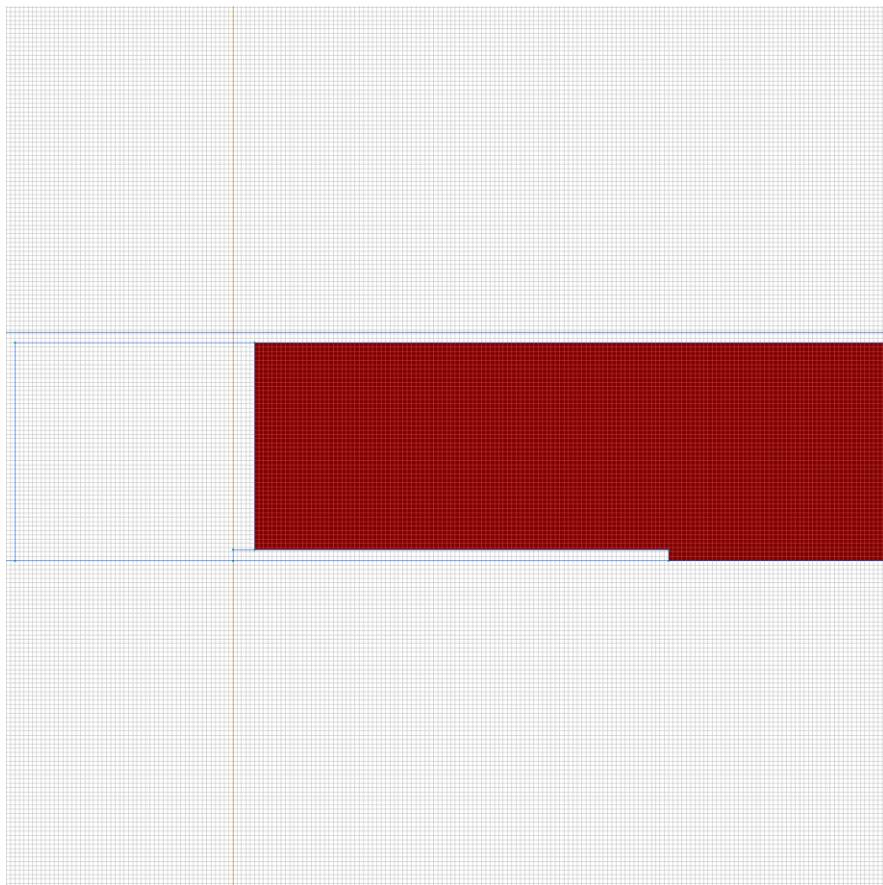


Labelled objects: block "Air"

There are (1) objects with this label

Relative electric permittivity $\epsilon_{sx}=1$, $\epsilon_{sy}=1$

Electrical conductivity $\sigma_x=0$ [S/m], $\sigma_y=0$ [S/m]



Labelled objects: edge "Bottom_Rod"

There are (1) objects with this label

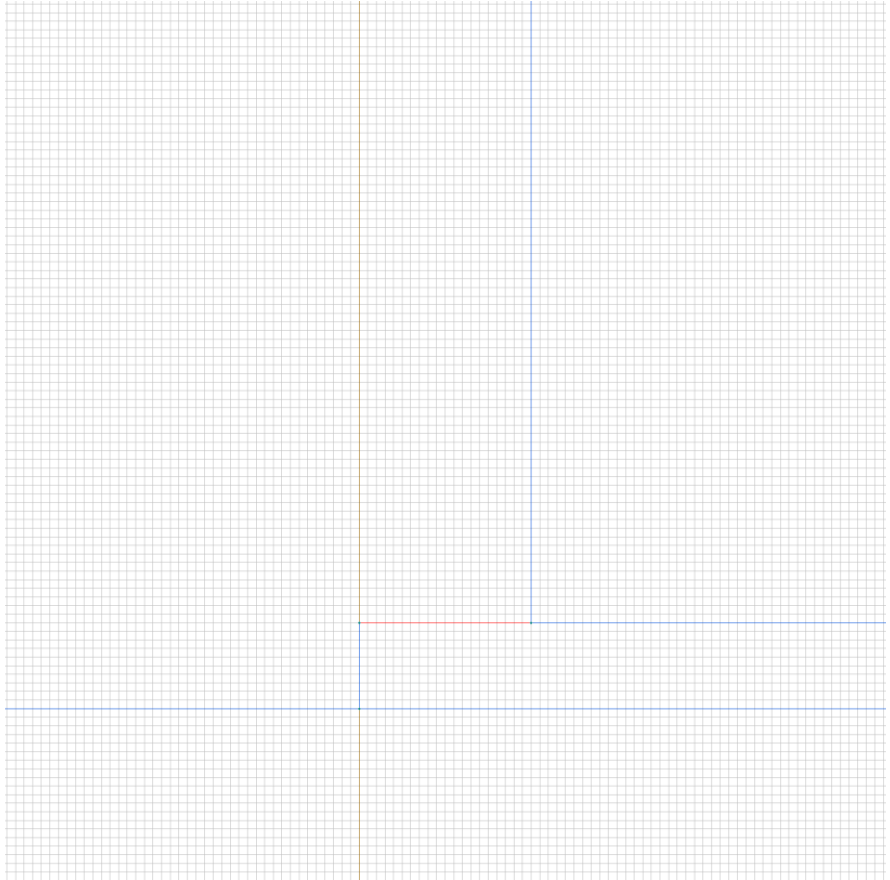
Voltage: $U=0$ [V], phase 0 [deg]



Labelled objects: edge "Level"

There are (1) objects with this label

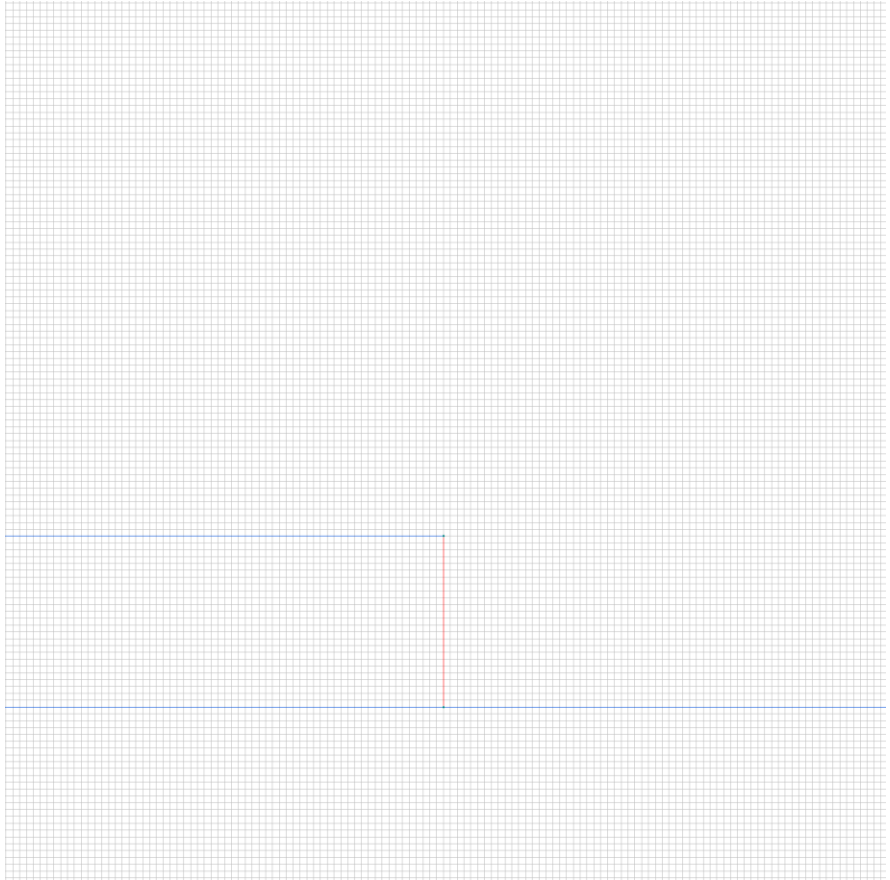
No material data (boundary conditions) are specified



Labelled objects: edge "Top_Rod"

There are (1) objects with this label

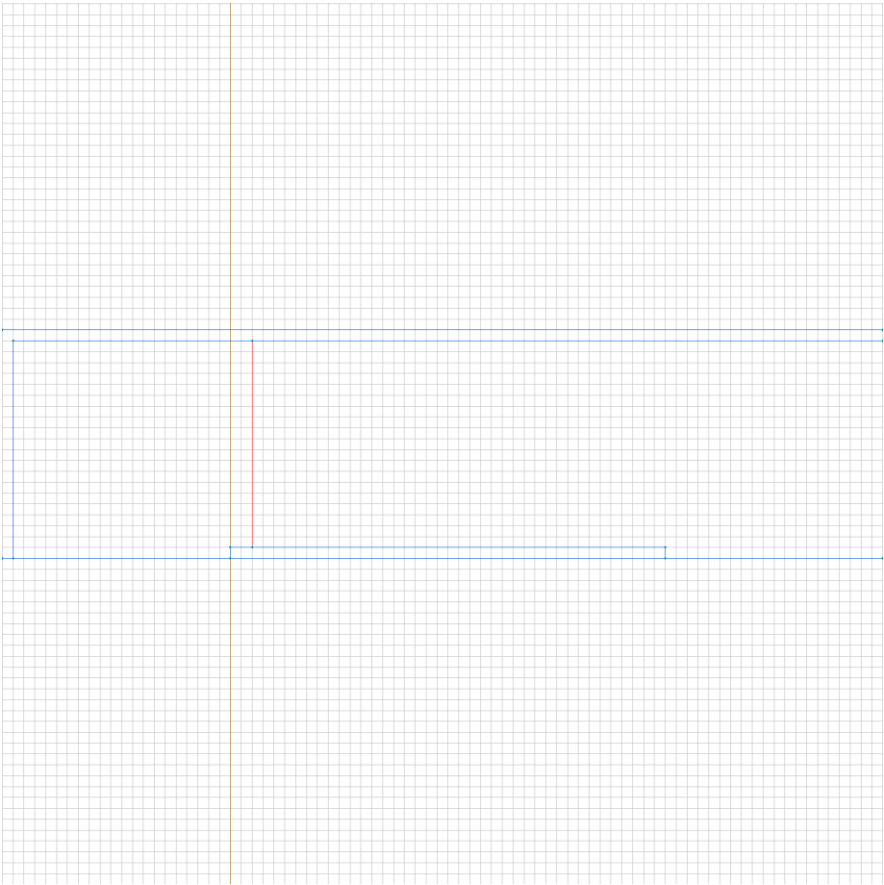
Voltage: $U=2$ [V], phase 0 [deg]



Labelled objects: edge "Surface"

There are (1) objects with this label

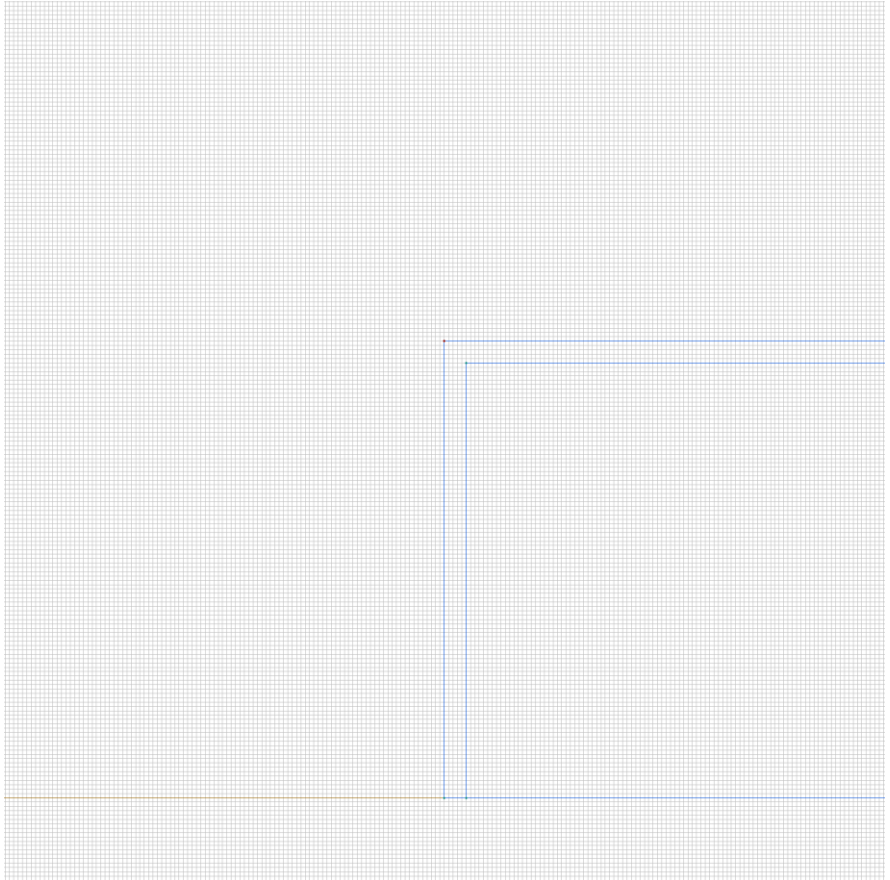
No material data (boundary conditions) are specified



Labelled objects: vertex "VoltageMeasured"

There are (1) objects with this label

No material data (boundary conditions) are specified



[Problem info](#)

[Geometry model](#)

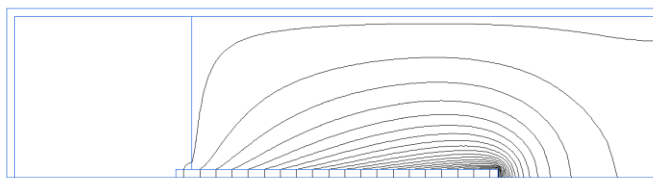
[Labelled Objects](#)

[Results](#)

[Nonlinear dependencies](#)

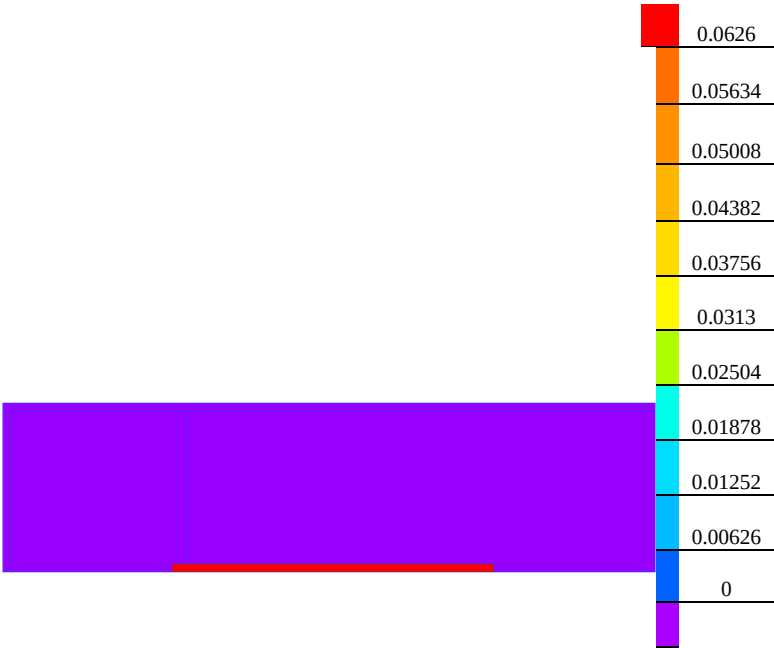
Results

Field lines



Results

Color map of Electric induction $|D|$ [C/m2]



Nonlinear dependencies

No non-linear dependencies are used in this problem data