P\_EOS\_STD\_1D\_1:

Problem Description

H problem - This example tests the ability of a code to represent pressure dissipation. The problem is defined assuming isothermal Darcian flow in a porous medium with Dirichlet conditions on the left and right sides of the 100-m long by 10-m thick domain (Figure 1). The initial condition is uniform pressure (0.1 MPa).

Model Set-Up

0.11 MPa

0.10 MPa

10m

100m

Properties

|  |  |  |
| --- | --- | --- |
|  | Matrix | Unit |
| Porosity | 0.5 | [n/a] |
| Permeability | 1.00E-12 | [m^2] |
| Density (rock) | 2500 | [kg/m^3] |